

St. Leger, Geoffrey

Access DB# 95664

## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Gwen Liang Examiner #: 79180 Date: 6-2-03  
Art Unit: 2172 Phone Number 303-3986 Serial Number: 09/692433  
Mail Box and Bldg/Room Location: CPK II 4B25 Results Format Preferred (circle) PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Rules Analyzer System and Method for Evaluating and Ranking  
Exact and Probabilistic Search Rules in an Enterprise Database

Inventors (please provide full names):

TIFFT, William Watson

Earliest Priority Filing Date: 10/19/2000

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Concept: A (1-2)

Focus: A (3)

Claim: 1 (B)

\* Refocus

\* Assignee: Eclipsys Corporation

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### STAFF USE ONLY

Staff Use Only	Type of Search	Vendors and cost where applicable
Searcher: <u>Geoffrey St. Leger</u>	NA Sequence (#) _____	STN _____
Searcher Phone #: <u>303-7800</u>	AA Sequence (#) _____	Dialog <u>/</u>
Searcher Location: <u>4133</u>	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: <u>6/8/3</u>	Bibliographic <u>/</u>	Dr. Link _____
Date Completed: <u>6/10/3</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>90 min</u>	Fulltext <u>/</u>	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>1.5 hours</u>	Other _____	Other (specify) _____

June 10, 2003

Dear Ms. Liang,

Attached please find the results of your search request for application #09/692,433. I searched Dialog's foreign patent files, technical databases, product announcement files and general files.

Please let me know if you have any questions.

Regards,

A handwritten signature in black ink, appearing to read "Geoffrey St. Leger". The signature is fluid and cursive, with the first name "Geoffrey" being more prominent and the last name "St. Leger" following in a similar style.

Geoffrey St. Leger  
4B30/308-7800

File 347:JAPIO Oct 1976-2003/Feb(Updated 030603)

(c) 2003 JPO & JAPIO

File 350:Derwent WPIX 1963-2003/UD,UM &UP=200336

(c) 2003 Thomson Derwent

Set	Items	Description
S1	724621	RULE? ? OR TEMPLATE? ? OR STRATEGY OR STRATEGIES OR FILTER? ? OR PLAN OR PLANS OR POLICY OR POLICIES OR QUERY OR SEARCH
S2	24752	S1(5N) (PERFORMANCE OR PERFORMED OR PROFICIEN? OR EFFECTIV? OR EFFICIEN? OR SUCCESS?)
S3	676	S2(5N) (MEASUR? OR ASSESS? OR EVALUAT? OR ANALYZ? OR ANALYS? OR CHECK??? OR GAUG??? OR QUANTIF? OR JUDG???)
S4	175	S1(10N) STATISTIC? ?
S5	112717	DATABASE? ? OR DATA() BASE? ? OR REPOSITOR??? OR SEARCH() EN- GINE? ?
S6	67	S3 AND S5
S7	52	S6 AND IC=G06F
S8	670327	RULE? ? OR TEMPLATE? ? OR STRATEGY OR STRATEGIES OR FILTER? ? OR PLAN OR PLANS OR POLICY OR POLICIES
S9	21087	S8(5N) (PERFORMANCE OR PERFORMED OR PROFICIEN? OR EFFECTIV? OR EFFICIEN? OR SUCCESS?)
S10	302	S9 AND S5 AND IC=G06F
S11	73	S10 AND (SEARCH? OR QUER???? OR RETRIEV?)
S12	65	S11 NOT S7
S13	514	S1(10N) STATISTIC?
S14	80	S13 AND S5 AND IC=G06F
S15	55	S14 AND (SEARCH? OR QUER???? OR RETRIEV?)
S16	51	S15 NOT (S7 OR S12)

7/5/4 (Item 4 from file: 347)  
DIALOG(R)File 347:JAPIO  
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06154674 \*\*Image available\*\*  
PERSONAL ASSET MANAGEMENT SYSTEM

PUB. NO.: 11-096217 [JP 11096217 A]  
PUBLISHED: April 09, 1999 (19990409)  
INVENTOR(s): MATSUO SHUNICHIRO  
KUBO KUNIYASU  
APPLICANT(s): THE YASUDA TRUST & BANKING CO LTD  
PFPS KENKYUKAI KK  
APPL. NO.: 09-256543 [JP 97256543]  
FILED: September 22, 1997 (19970922)  
INTL CLASS: G06F-017/60

#### ABSTRACT

PROBLEM TO BE SOLVED: To decide a **plan** concerning inheritance and business **succession** based on an **evaluation** result by appropriately evaluating the value of personal assets.

SOLUTION: This system is constituted of an information input part where whole information required for the management of the personal assets is inputted, a **database** where respective kinds of information required for evaluating the personal assets is stored, an evaluating part 3 for evaluating the personal assets based on information which is stored in the **database** 2, an inheritance plan generating part 4 for deciding na inheritance portion about an individual inheritance person and an information output part 5 for outputting information which is inputted, stored or decided. Then, the value of the personal assets, which is inputted from the information input part is evaluated by the evaluating part 3 through the use of data stored in the **database** 2 and a calculation formula, the plan of inheritance, etc., is decided based on an evaluation result and a simulation is executed.

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7/5/5 (Item 5 from file: 347)  
DIALOG(R)File 347:JAPIO  
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05748505 \*\*Image available\*\*  
ACTIVE **DATABASE** MANAGING SYSTEM

PUB. NO.: 10-031605 [JP 10031605 A]  
PUBLISHED: February 03, 1998 (19980203)  
INVENTOR(s): WADA MITSUNORI  
APPLICANT(s): OKI ELECTRIC IND CO LTD [000029] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 08-206491 [JP 96206491]  
FILED: July 17, 1996 (19960717)  
INTL CLASS: [6] G06F-012/00  
JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units)

#### ABSTRACT

PROBLEM TO BE SOLVED: To **efficiently evaluate** the **rules** of respective data items.

SOLUTION: A reception flag 3 is prepared for each data item in a **database** 10. In initial state, the reception flag 3 is '0'. When the event of write access is generated about a certain data item and that data item generating the event satisfies ECA rules, the reception flag 3 of that data item is turned to '1' by an event dispatcher 1. Afterwards, it is not inspected whether or not the event is to be received during a transaction. Concerning the data item of which the reception flag 3 is '1', on one hand, the reception flag 3 is returned to '0' and based on the conditional expression



of ECA rules, a transaction 232 for evaluating the data value of that data item is scheduled by a transaction scheduler 2. For the data item of which the reception flag 3 is not set, on the other hand, nothing is performed.

7/5/16 (Item 8 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

014624589  
WPI Acc No: 2002-445293/200248  
XRPX Acc No: N02-350752

Measuring **clinical** effectiveness of diagnostic systems involves search and assessment program for success-oriented statistical evaluation of all patient files for defined illness or diagnosis

Patent Assignee: SIEMENS AG (SIEI )  
Inventor: KUTH R; NEMETH R  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 10048422	A1	20020425	DE 1048422	A	20000929	200248 B

Priority Applications (No Type Date): DE 1048422 A 20000929

Patent Details:  
Patent No Kind Lan Pg Main IPC Filing Notes  
DE 10048422 A1 4 G06F-017/60

Abstract (Basic): DE 10048422 A1

NOVELTY - The method involves the use of patient files stored in a central **database** and containing the diagnostic systems used, the therapies and the progress of the illness. A **search** and **assessment** program for **success**-oriented statistical **evaluation** of all patient files for a defined illness or admission diagnosis is performed to determine the relevant use of the system.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: an arrangement for implementing the method.

USE - For measuring clinical effectiveness of diagnostic systems.

ADVANTAGE - Measurement takes place without the specific involvement of an operator and hence without operator subjectivity.

pp; 4 DwgNo 0/1

Title Terms: MEASURE; CLINICAL; EFFECT; DIAGNOSE; SYSTEM; SEARCH; ASSESS; PROGRAM; SUCCESS; ORIENT; STATISTICAL; EVALUATE; PATIENT; FILE; DEFINE; ILL; DIAGNOSE

Derwent Class: P31; S05; T01

International Patent Class (Main): G06F-017/60

International Patent Class (Additional): A61B-019/00

File Segment: EPI; EngPI

7/5/18 (Item 10 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014491636 \*\*Image available\*\*  
WPI Acc No: 2002-312339/200235  
XRPX Acc No: N02-244969

Measuring device has memory with large storage capacity for storing measurement data which are selectively searched based on designated search conditions, and displayed

Patent Assignee: YOKOGAWA DENKI KK (YOKG )  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2002071390	A	20020308	JP 2000258938	A	20000829	200235 B

Priority Applications (No Type Date): JP 2000258938 A 20000829

Patent Details:  
Patent No Kind Lan Pg Main IPC Filing Notes

Abstract (Basic): JP 2002071390 A

NOVELTY - A designation unit (1) specifies conditions for search of selected measurement data among several measurement data stored in a memory (3). An execution unit (2) executes search process of the measurement **data based** on the designated search conditions. A display unit (4) displays the search result.

USE - Measuring device with measurement data storage function.

ADVANTAGE - Provides flexible and **efficient measurement data search** functions and provides freedom in designating search conditions.

DESCRIPTION OF DRAWING(S) - The figure shows a basic component diagram of the measuring device. (Drawing includes non-English language text).

Designation unit (1)

Execution unit (2)

Memory (3)

Display unit (4)

pp; 8 DwgNo 1/7

Title Terms: MEASURE; DEVICE; MEMORY; STORAGE; CAPACITY; STORAGE; MEASURE; DATA; SELECT; SEARCH; BASED; DESIGNATED; SEARCH; CONDITION; DISPLAY

Derwent Class: S02; T01

International Patent Class (Main): G01D-009/00

International Patent Class (Additional): **G06F-017/30**

File Segment: EPI

7/5/21 (Item 13 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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014379936 \*\*Image available\*\*

WPI Acc No: 2002-200639/200226

XRPX Acc No: N02-152698

**Image search method in computer, involves updating weighting information corresponding to searched image based on evaluation with respect to searched image**

Patent Assignee: YAMAHA MOTOR CO LTD (YMHA )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2002032410	A	20020131	JP 2000215275	A	20000717	200226 B

Priority Applications (No Type Date): JP 2000215275 A 20000717

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2002032410	A		18	G06F-017/30	

JP 2002032410 A 18 G06F-017/30

Abstract (Basic): JP 2002032410 A

NOVELTY - An image is searched from a **database**, based on the characteristic and weighting information of the input search key. An evaluation with respect to the searched image is input. The weighting information corresponding to the searched image, is updated based on the evaluation result.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) Image search device;

(b) Audio search device;

(c) Lexicon search device

USE - For searching images such as pictures, photographs stored in computer.

ADVANTAGE - By updating the weighting information of the images based on the **evaluation** of searched image, the image **search efficiency** is improved.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart of image search process. (Drawing includes non-English language text).

pp; 18 DwgNo 6/13

Title Terms: IMAGE; SEARCH; METHOD; COMPUTER; UPDATE; WEIGHT; INFORMATION;  
CORRESPOND; SEARCH; IMAGE; BASED; EVALUATE; RESPECT; SEARCH; IMAGE  
Derwent Class: T01  
International Patent Class (Main): G06F-017/30  
International Patent Class (Additional): G06T-001/00  
File Segment: EPI

7/5/22 (Item 14 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014379826 \*\*Image available\*\*  
WPI Acc No: 2002-200529/200226  
XRPX Acc No: N02-152588

Exclusion control method for database system, involves selecting optimum access plan, based on evaluated cost of each access plan containing simultaneous transaction processing efficiency

Patent Assignee: RICOH KK (RICO )  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2002032249	A	20020131	JP 2000219745	A	20000719	200226 B

Priority Applications (No Type Date): JP 2000219745 A 20000719

Patent Details:  
Patent No Kind Lan Pg Main IPC Filing Notes  
JP 2002032249 A 15 G06F-012/00

Abstract (Basic): JP 2002032249 A

NOVELTY - Enquiry optimization access plan is produced based on the generated lock process procedure, for performing simultaneous transaction execution control operation. The cost of the access plan containing simultaneous transaction execution efficiency is evaluated for each access plan. An optimum access plan is selected, based on the evaluated cost of the access plans.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) Recorded medium storing exclusion control program;
- (b) Exclusion controller;
- (c) Exclusion control program;
- (d) Database system

USE - For exclusion controller (claimed) for performing simultaneous execution control of a database system (claimed) based on relational model.

ADVANTAGE - Optimizes the transaction execution efficiency by selecting optimum access plan.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of exclusion controller. (Drawing includes non-English language text).

pp; 15 DwgNo 2/4

Title Terms: EXCLUDE; CONTROL; METHOD; DATABASE ; SYSTEM; SELECT; OPTIMUM; ACCESS; PLAN; BASED; EVALUATE; COST; ACCESS; PLAN; CONTAIN; SIMULTANEOUS; TRANSACTION; PROCESS; EFFICIENCY

Derwent Class: T01  
International Patent Class (Main): G06F-012/00  
International Patent Class (Additional): G06F-015/00 ; G06F-017/30  
File Segment: EPI

7/5/24 (Item 16 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014357022 \*\*Image available\*\*  
WPI Acc No: 2002-177723/200223  
XRPX Acc No: N02-135305

Patent information management device for recording of patent has total device which obtains total of search results from public-knowledge

reference and application document databases into predetermined format

Patent Assignee: FUJITSU LTD (FUJIT ); SHIN CATERPILLAR MITSUBISHI LTD  
(CATE )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2002024284	A	20020125	JP 2000206916	A	20000707	200223 B

Priority Applications (No Type Date): JP 2000206916 A 20000707

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 2002024284	A	37	G06F-017/30	

Abstract (Basic): JP 2002024284 A

NOVELTY - An integrator (25) combines the search results from a public-knowledge reference **database** (2A-1,2A-2) and an application document **database** (2B-3) after an item order conversion. A total device (26) obtains the total of the search results from the public-knowledge reference **database** and the application document **database** into the predetermined format of the total item after the integration process.

DETAILED DESCRIPTION - The data converters (23A,23B) convert the common writing book-data into the item order of a total item and into the same order of the total item among the total device. INDEPENDENT CLAIMS are also included for the following:

- (a) a patent-information total output method;
- (b) a patent-information total output device;
- (c) and a computer-readable recording medium which stores a patent information management program.

USE - Applicable for recording of patent information.

ADVANTAGE - Attains suppression of number of artificial operation in combination of search results from public-knowledge reference **database** and application document **database** . Enables simple **search result analysis** and **efficient** determination of **effective** patent **strategy** due to combination of writing book data.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of component of a patent information management system. (Drawing includes non-English language text).

Public-knowledge reference **database** (2A-1,2A-2)

Application document **database** (2B-3)

Data converters (23A,23B)

Integrator (25)

Total device (26)

pp; 37 DwgNo 1/31

Title Terms: PATENT; INFORMATION; MANAGEMENT; DEVICE; RECORD; PATENT; TOTAL ; DEVICE; OBTAIN; TOTAL; SEARCH; RESULT; PUBLIC; REFERENCE; APPLY; DOCUMENT; PREDETERMINED; FORMAT

Derwent Class: T01

International Patent Class (Main): G06F-017/30

International Patent Class (Additional): G06F-017/60 ; G06F-019/00

File Segment: EPI

7/5/27 (Item 19 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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014159216

WPI Acc No: 2001-643444/200174

XRFX Acc No: N01-481432

**Proposed type information display method for internet, involves displaying search result by analyzing databases based on new search conditions provided by search person**

Patent Assignee: I FRONTIER KK (IFRO-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2001256250	A	20010921	JP 200066622	A	20000310	200174 B

Priority Applications (No Type Date): JP 200066622 A 20000310

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2001256250	A		3	G06F-017/30	

Abstract (Basic): JP 2001256250 A

NOVELTY - The information for access by a search person registered as member, is stored in a **database**. The search result is displayed by analyzing the **database** based on new search conditions provided by the search person.

USE - For displaying real estate, employment and goods purchasing information internet.

ADVANTAGE - The search result required for **search** persons are provided **efficiently** by **analyzing** the **databases** based on new search condition provided by the person.

pp; 3 DwgNo 0/0

Title Terms: PROPOSED; TYPE; INFORMATION; DISPLAY; METHOD; DISPLAY; SEARCH; RESULT; BASED; NEW; SEARCH; CONDITION; SEARCH; PERSON

Derwent Class: T01

International Patent Class (Main): **G06F-017/30**

File Segment: EPI

7/5/31 (Item 23 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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013612326 \*\*Image available\*\*

WPI Acc No: 2001-096534/200111

XRPX Acc No: N01-073360

**Information retrieval system extracts information from dictionary and database based on search request determined corresponding to user's intention**

Patent Assignee: VICTOR CO OF JAPAN (VICO )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2000331022	A	20001130	JP 99141266	A	19990521	200111 B

Priority Applications (No Type Date): JP 99141266 A 19990521

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2000331022	A		11	G06F-017/30	

Abstract (Basic): JP 2000331022 A

NOVELTY - Analyzer (13) analyzes character row extracted from user's input using internal dictionary (14) to extract user's intent. Interactive controller (15) determines search request communicated to server side communication controller (26) which communicates request to dictionary and **database** search servers (23,25) and information extracted based on request, are communicated to interactive controller.

USE - For providing information corresponding to demand of user, by searching **database** using natural language.

ADVANTAGE - Information from **database** are retrieved **effectively**, based on **search** request determined corresponding to **analysis** of user's input speech, hence there is no restriction on user's vocabulary, and cost of internal dictionary of the system is reduced.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of information retrieval system.

Analysis unit (13)

Internal dictionary (14)

Interactive control unit (15)

Dictionary (22)

Servers (23,25)

**Database** (24)

Communication control unit (26)

pp; 11 DwgNo 1/4

·Title Terms: INFORMATION; RETRIEVAL; SYSTEM; EXTRACT; INFORMATION;  
DICTIONARY; **DATABASE** ; BASED; SEARCH; REQUEST; DETERMINE; CORRESPOND;  
USER; INTENTIONAL  
Derwent Class: T01  
International Patent Class (Main): **G06F-017/30**  
International Patent Class (Additional): **G06F-009/44 ; G06F-013/00 ;**  
**G06F-017/28**  
File Segment: EPI

7/5/33 (Item 25 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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013465237 \*\*Image available\*\*  
WPI Acc No: 2000-637180/200061  
Related WPI Acc No: 2002-187493  
XRPX Acc No: N00-472478

**Query processing method in relational database management system,  
involves identifying if partition properties of both query evaluation  
plans have interesting partition property values**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )  
Inventor: LOHMAN G M; SHEKITA E J; SIMMEN D E; URATA M S  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6092062	A	20000718	US 97885073	A	19970630	200061 B

Priority Applications (No Type Date): US 97885073 A 19970630

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6092062	A		21	G06F-017/30	

Abstract (Basic): US 6092062 A

NOVELTY - Determination is done whether the query evaluation plans (QEPA,QEPB) relatively have interesting partition property values. When existence of property values is determined, the equivalence between the values is analyzed.

DETAILED DESCRIPTION - A query which is executable in connection with partitioned data tables, is received. Several interesting partition property values, each indicating direct benefit for execution of anticipated reactor of query are generated. Several evaluation plans for consideration in execution of all or portion of the query are generated. An INDEPENDENT CLAIM is also included for relational **database** management system.

USE - For **efficient evaluation** of structured **query** language statement processed in relational **database** management systems.

ADVANTAGE - **Efficiently evaluates** complex **query** statements by careful consideration of query operator properties.

DESCRIPTION OF DRAWING(S) - The figure shows the flow diagram of processing steps executed by computer processing system.

pp; 21 DwgNo 9/10

Title Terms: QUERY; PROCESS; METHOD; RELATED; **DATABASE** ; MANAGEMENT;  
SYSTEM; IDENTIFY; PARTITION; PROPERTIES; QUERY; EVALUATE; PLAN; INTEREST;  
PARTITION; PROPERTIES; VALUE

Derwent Class: T01  
International Patent Class (Main): **G06F-017/30**  
File Segment: EPI

7/5/34 (Item 26 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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013302799 \*\*Image available\*\*  
WPI Acc No: 2000-474734/200041  
XRPX Acc No: N00-354145

**Query evaluation method for distributed semi-structured database ,**

involves identifying a part of separated portions contributing to final query result based on combined single graph, to generate final query result

Patent Assignee: AT & T CORP (AMTT )

Inventor: SUCIU D

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6076087	A	20000613	US 9766471	A	19971126	200041 B
			US 9859640	A	19980413	

Priority Applications (No Type Date): US 9766471 P 19971126; US 9859640 A 19980413

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6076087	A	41	G06F-017/30	Provisional application US 9766471

Abstract (Basic): US 6076087 A

NOVELTY - The query for each of the separated portions of **database** is evaluated. Based on evaluated queries, respective accessibility graphs are generated corresponding to each of the separated portions. The accessibility graphs are combined to a single graph. Based on combined single graph, the parts of separated portions that contribute to final query result are identified, to generate the final query result.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for network operating system generating a final query result of **database**.

USE - For evaluating query used for distributed semi-structured **database** in internet or intranetworks.

ADVANTAGE - The client terminal receives the accessibility graphs from all the terminals and constructs an accessibility graph for complete distributed **database** using simple technique. **Evaluates query** for distributed **database** in an **efficient** manner since the total number of communication steps among the terminals is independent of the contents of the distributed **database**. The total number of data transferred among the terminals depends on the total number of interrelationship of the **database** portions among the terminals and the size of the evaluation result.

DESCRIPTION OF DRAWING(S) - The figure shows the accessibility graphs connected to each other.

pp; 41 DwgNo 10/42

Title Terms: QUERY; EVALUATE; METHOD; DISTRIBUTE; SEMI; STRUCTURE;

**DATABASE** ; IDENTIFY; PART; SEPARATE; PORTION; CONTRIBUTE; FINAL; QUERY;

RESULT; BASED; COMBINATION; SINGLE; GRAPH; GENERATE; FINAL; QUERY; RESULT

Derwent Class: T01

International Patent Class (Main): **G06F-017/30**

File Segment: EPI

7/5/35 (Item 27 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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013051517 \*\*Image available\*\*

WPI Acc No: 2000-223371/200019

Related WPI Acc No: 1999-131656

XRPX Acc No: N00-167403

**Query optimizing and processing method for database management system in computer network**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: LEUNG T Y; LUI A C; PIRAHESH M H; TRUONG T C

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6032143	A	20000229	US 97884697	A	19970630	200019 B
			US 98206194	A	19981204	

Priority Applications (No Type Date): US 97884697 A 19970630; US 98206194 A

19981204

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6032143	A		15	G06F-017/30	Cont of application US 97884697
					Cont of patent US 5864840

Abstract (Basic): US 6032143 A

NOVELTY - One alternative query plan is selected to process a query depending on other alternative query plans generated based on a rewritten query to compare the table columns on a set of nodes in a computer network. The method involves receiving a query containing a sub-query. The table columns in the sub-query are compared.

USE - For **database** management system in computer network.

ADVANTAGE - Converts sub-queries to scalar sub-queries. Allows sending of upper tables to lower tables and vice-versa. Increases maximum processing **efficiency**. **Evaluates** and determines optimal **plan** for each alternative.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart of an query optimizing and processing method.

pp; 15 DwgNo 5/5

Title Terms: QUERY; PROCESS; METHOD; **DATABASE** ; MANAGEMENT; SYSTEM; COMPUTER; NETWORK

Derwent Class: T01

International Patent Class (Main): **G06F-017/30**

File Segment: EPI

7/5/36 (Item 28 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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013030179 \*\*Image available\*\*

WPI Acc No: 2000-202030/200018

Related WPI Acc No: 1996-213308; 2000-186682; 2000-202031

XRPX Acc No: N00-150511

**Data analysis method of databases , involves evaluating relationship between chosen items, and outputting data items with highest evaluation value**

Patent Assignee: HITACHI LTD (HITA )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2000039999	A	20000208	JP 94239437	A	1994090	200018 B
			JP 99158818	A	19940907	

Priority Applications (No Type Date): JP 94239437 A 19940907; JP 99158818 A 19940907

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2000039999	A		20	G06F-009/44	Div ex application JP 94239437

Abstract (Basic): JP 2000039999 A

NOVELTY - The numerical value of data item used for IF node and THEN node of IF-THEN rule is chosen and converted to symbol. The relationship between chosen data items is evaluated, and the data item with highest value is determined and output. DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for data analysis apparatus.

USE - For **databases** .

ADVANTAGE - **Effective** drafting of marketing **strategy** is performed by **analysis** of customer **database** . Characteristic of data items is expressed accurately, and high utilization value is provided to user as the data are converted to symbol before evaluation.

DESCRIPTION OF DRAWING(S) - The figure shows block diagram of data analysis system.

Dwg.4/16

Title Terms: DATA; ANALYSE; METHOD; EVALUATE; RELATED; CHOICE; ITEM; OUTPUT ; DATA; ITEM; HIGH; EVALUATE; VALUE

Derwent Class: T01

International Patent Class (Main): **G06F-009/44**



.File Segment: EPI

7/5/38 (Item 30 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

012813651 \*\*Image available\*\*  
WPI Acc No: 1999-619882/199953  
XRPX Acc No: N99-457171

**Hypothetical information query evaluating method for database system**

Patent Assignee: LUCENT TECHNOLOGIES INC (LUCE )

Inventor: GRIFFIN T G; HULL R B

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5978789	A	19991102	US 97852652	A	19970507	199953 B

Priority Applications (No Type Date): US 97852652 A 19970507

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5978789	A		21	G06F-017/30	

Abstract (Basic): US 5978789 A

NOVELTY - One or more algebraic equivalences involving explicit substitutions, are applied to generate a query that is equivalent to hypothetical query. The subset of explicit substitutions represents a hypothetical **database** state change. Then, the equivalent query is directly evaluated.

DETAILED DESCRIPTION - The amount of time required to directly evaluate each of the queries in the set of additional queries, is estimated. A particular query from the set of additional queries, which has the lowest estimated evaluation time, is selected for direct evaluation. Hypothetical query is in a normal form for direct evaluation where in the normal form indicates that one or more hypothetical state expressions of the query correspond to explicit substitutions. An INDEPENDENT CLAIM is also included for hypothetical query evaluation apparatus.

USE - For evaluating hypothetical information query in **database** system.

ADVANTAGE - **Evaluation** process is facilitated **efficiently** by configuring the original hypothetical **query** in a normal form such that each hypothetical state expression of the query is specified by explicit substitutions.

DESCRIPTION OF DRAWING(S) - The figure shows the family of equivalences in an exemplary set of hypothetical query language expressions.

pp; 21 DwgNo 2A-2C/7

Title Terms: HYPOTHESIS; INFORMATION; QUERY; EVALUATE; METHOD; **DATABASE** ;  
SYSTEM

Derwent Class: T01

International Patent Class (Main): **G06F-017/30**

File Segment: EPI

7/5/39 (Item 31 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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012804660 \*\*Image available\*\*  
WPI Acc No: 1999-610890/199952  
Related WPI Acc No: 1999-610876  
XRPX Acc No: N99-450139

**Precomputed database processing method for user query management**

Patent Assignee: INFORMIX SOFTWARE INC (INFO-N); INT BUSINESS MACHINES CORP  
(IBMC )

Inventor: COLBY L S; COLE R L; HASLAM E P; JAZAYERI N; JOHNSON G; MCKENNA W  
J; WILHITE D G

Number of Countries: 024 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9950762	A1	19991007	WO 99US6297	A	19990325	199952 B
AU 9931985	A	19991018	AU 9931985	A	19990325	200010
EP 1066574	A1	20010110	EP 99914054	A	19990325	200103
			WO 99US6297	A	19990325	
US 20010013030	A1	20010809	US 9849784	A	19980327	200147
			US 9879670	A	19980327	
			US 9879671	A	19980327	
			US 9879679	A	19980327	
			US 99277034	A	19990325	
BR 9909896	A	20010911	BR 999896	A	19990325	200162
			WO 99US6297	A	19990325	
JP 2002510088	W	20020402	WO 99US6297	A	19990325	200225
			JP 2000541606	A	19990325	
US 20020077997	A1	20020620	US 9849784	A	19980327	200244
			US 9879670	A	19980327	
			US 9879671	A	19980327	
			US 9879679	A	19980327	
			US 99277040	A	19990325	
US 6480836	B1	20021112	US 9849784	A	19980327	200278
			US 9879670	A	19980327	
			US 9879671	A	19980327	
			US 9879679	A	19980327	
			US 99277041	A	19990325	
US 6493699	B2	20021210	US 9849784	A	19980327	200301
			US 9879670	A	19980327	
			US 9879671	A	19980327	
			US 9879679	A	19980327	
			US 99277034	A	19990325	

Priority Applications (No Type Date): US 9879679 P 19980327; US 9849784 A 19980327; US 9879670 P 19980327; US 9879671 P 19980327; US 99277034 A 19990325; US 99277040 A 19990325; US 99277041 A 19990325

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 9950762	A1	E	57	G06F-017/30	
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Designated States (National): AU BR CA JP MX

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

AU 9931985	A				
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Based on patent WO 9950762

EP 1066574	A1	E		G06F-017/30	
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Based on patent WO 9950762

Designated States (Regional): DE ES FR GB IE IT NL SE

US 20010013030	A1			G06F-007/00	
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Cont of application US 9849784

Provisional application US 9879670

Provisional application US 9879671

Provisional application US 9879679

Cont of patent US 6199063

BR 9909896	A			G06F-017/30	
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Based on patent WO 9950762

JP 2002510088	W		68	G06F-017/30	
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Based on patent WO 9950762

US 20020077997	A1			G06F-007/00	
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Cont of application US 9849784

Provisional application US 9879670

Provisional application US 9879671

Provisional application US 9879679

US 6480836	B1			G06F-017/30	
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Cont of application US 9849784

Provisional application US 9879670

Provisional application US 9879671

Provisional application US 9879679

Cont of patent US 6199063

US 6493699	B2			G06F-017/30	
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Cont of application US 9849784

Provisional application US 9879670

Provisional application US 9879671

Provisional application US 9879679

Cont of patent US 6199063

Abstract (Basic): WO 9950762 A1

NOVELTY - The user's query on specific database is analyzed and a

common candidate suggestion is generated in sub-language (SQL). Then, an analysis space consisting of all possible subsets of suggestions is defined based on the stored user query **database**. The precomputation strategy and suggestions are characterized in the analysis space.

DETAILED DESCRIPTION - During defining suggestions, a specific formula is used depending on the user defined subset data. A log record is generated based on the received user queries. Based on the record, specific suggestion data for modifying the user query is identified. The common suggestions is generated based on the meta data comprising user specified hierarchical data. A specific graph representing hierarchical relationship between the suggestions is indicated in the analysis space. An INDEPENDENT CLAIM is also included for precomputed **database** processor.

USE - For user query management in decision support system and retail management in stores using relational **database** management system (RDBMS).

ADVANTAGE - Enables **evaluation** of optical precomputed aggregates, by **effective analysis** of user **query**. Reduces **analysis** time, as **analysis** is carried out based on the user defined subset data. Due to the query rewriting facility, aggregate performance of **database** is modified by **database** administrator without affecting queries.

DESCRIPTION OF DRAWING(S) - The figure shows the flow chart explaining the precomputed **database** managing method.

pp; 57 DwgNo 7A/13

Title Terms: **DATABASE** ; PROCESS; METHOD; USER; QUERY; MANAGEMENT

Derwent Class: T01

International Patent Class (Main): G06F-007/00 ; G06F-017/30

File Segment: EPI

7/5/41 (Item 33 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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012603227 \*\*Image available\*\*

WPI Acc No: 1999-409331/199935

XRPX Acc No: N99-305706

**Information extraction device for computer, internet - performs search on predetermined database based on designated character or keyword, analyzes sentences containing search word and chooses specific data from search result**

Patent Assignee: TOSHIBA KK (TOKE ); KINOSHITA S (KINO-I); SAKO T (SAKO-I)

Inventor: KINOSHITA S; SAKO T

Number of Countries: 002 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 11161682	A	19990618	JP 98139539	A	19980521	199935 B
US 20020002547	A1	20020103	US 98161383	A	19980928	200207
US 6442540	B2	20020827	US 98161383	A	19980928	200259
US 20020184204	A1	20021205	US 98161383	A	19980928	200301
			US 2002189536	A	20020708	
US 20020194156	A1	20021219	US 98161383	A	19980928	200303
			US 2002189482	A	20020708	

Priority Applications (No Type Date): JP 97263606 A 19970929

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 11161682	A		17	G06F-017/30	
US 20020002547	A1			G06F-007/00	
US 6442540	B2			G06F-017/30	
US 20020184204	A1			G06F-007/00	Div ex application US 98161383
					Div ex patent US 6442540
US 20020194156	A1			G06F-017/30	Div ex application US 98161383
					Div ex patent US 6442540

Abstract (Basic): JP 11161682 A

NOVELTY - The character data of the word in a document or an idiom is designated, based on which the **search** is **performed**. The

sentences containing these **search** keyword data are **analyzed** . Based on the search analysis result, the specific data suitable for designated character or keyword is extracted. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: information retrieval method; recording medium for storing information retrieval program

USE - For computer, internet.

ADVANTAGE - Enables efficient extraction of information. Reduces load on user. DESCRIPTION OF DRAWING(S) - The diagram shows the block diagram of the information retrieval apparatus.

Dwg.1/32

Title Terms: INFORMATION; EXTRACT; DEVICE; COMPUTER; PERFORMANCE; SEARCH; PREDETERMINED; **DATABASE** ; BASED; DESIGNATED; CHARACTER; KEYWORD; ANALYSE ; SENTENCE; CONTAIN; SEARCH; WORD; CHOICE; SPECIFIC; DATA; SEARCH; RESULT  
Derwent Class: T01  
International Patent Class (Main): **G06F-007/00 ; G06F-017/30**  
International Patent Class (Additional): **G06F-017/27 ; G06F-017/28**  
File Segment: EPI

**7/5/46 (Item 38 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

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011325264 \*\*Image available\*\*

WPI Acc No: 1997-303168/199728

XPX Acc No: N97-250749

**Rule generation method - performs rule evaluation processing for validity evaluation of appearance area forming rule express**

Patent Assignee: HITACHI LTD (HITA )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 9114669	A	19970502	JP 95266774	A	19951016	199728 B

Priority Applications (No Type Date): JP 95266774 A 19951016

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 9114669	A		12	G06F-009/44	

Abstract (Basic): JP 9114669 A

The methods performs analysis from the data which consists of collection of records stored in a **database** (2). A record extraction processing (10) performs random extraction from the collection of records responding to the predetermined rule generation conditions. The number of detection of the appearance area of the record with the defined characteristic as rule generation condition is carried out. A rule generation processing (20) forms the rule express consisting of the appearance areas of a condition part and a conclusion part and uses all records of data for **analysis** . A **rule evaluation** processing (30) is **performed** for validity **evaluation** of the area forming rule expresses.

ADVANTAGE - Satisfies rule generation conditions. Generates rule for reflecting characteristic of entire data or analysis.

Dwg.1/14

Title Terms: RULE; GENERATE; METHOD; PERFORMANCE; RULE; EVALUATE; PROCESS; VALID; EVALUATE; APPEAR; AREA; FORMING; RULE; EXPRESS  
Derwent Class: T01  
International Patent Class (Main): **G06F-009/44**  
International Patent Class (Additional): **G06F-017/30**  
File Segment: EPI

**7/5/48 (Item 40 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

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010844923 \*\*Image available\*\*

WPI Acc No: 1996-341876/199634

XRPX Acc No: N96-287800

**Data array analysis appts. for quantitative database - includes link pointers associated with diagnostic records and relation data items so that user can select diagnostic records and retrieve corresponding data items**

Patent Assignee: AMADO A (AMAD-I)

Inventor: AMADO A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5537590	A	19960716	US 93102581	A	19930805	199634 B

Priority Applications (No Type Date): US 93102581 A 19930805

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5537590	A	220	G06F-017/00	

Abstract (Basic): US 5537590 A

The apparatus includes memory for storing a quantitative **database** as a table in a relational **database**. A program is executed on a computer, for controlling the computer to receive user input defining one or more **analysis rules** to be **performed** on data subsets. The subsets are analysed in accordance with user defined analysis rules to generate diagnostic records. User programmable link pointers for each diagnostic record are generated, linking a diagnostic to the user selected subset data.

The diagnostic records are held in a diagnostic **database** in memory. Routines are included for controlling the computer to display windows, one window displays data items from the relational **database** and another displays diagnostic records. A pointer, displayed in the diagnostic window, receives and processes user data such that records in the diagnostic window can be selected and the corresponding data items can be displayed in the first window.

ADVANTAGE - Provides time and cost reductions. Allows data organisation by function, action and end-user preferences. Deals with vast amounts of data, chaining recommendations and logical expert interfaces in structured **database**. Presents sorted, filtered and structured lists of diagnostics. Allows integration with other applications.

Dwg.2/93

Title Terms: DATA; ARRAY; ANALYSE; APPARATUS; QUANTITATIVE; **DATABASE** ;  
LINK; POINT; ASSOCIATE; DIAGNOSE; RECORD; RELATED; DATA; ITEM; SO; USER;  
CAN; SELECT; DIAGNOSE; RECORD; RETRIEVAL; CORRESPOND; DATA; ITEM

Derwent Class: T01

International Patent Class (Main): **G06F-017/00**

International Patent Class (Additional): **G06F-017/30**

File Segment: EPI

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12/5/12 (Item 12 from file: 347)  
DIALOG(R)File 347:JAPIO  
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04505984 \*\*Image available\*\*  
SYSTEM AND METHOD FOR DATA BASE MATERIAL

PUB. NO.: 06-149884 [JP 6149884 A]  
PUBLISHED: May 31, 1994 (19940531)  
INVENTOR(s): TERAOKA MASATO  
YAMADA MICHIKO  
APPLICANT(s): FUJI ROJITETSUKU KK [456965] (A Japanese Company or  
Corporation), JP (Japan)  
APPL. NO.: 04-314367 [JP 92314367]  
FILED: October 30, 1992 (19921030)  
INTL CLASS: [5] G06F-015/40 ; G06F-015/40 ; G06F-015/18  
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications)  
JOURNAL: Section: P, Section No. 1794, Vol. 18, No. 466, Pg. 15,  
August 30, 1994 (19940830)

#### ABSTRACT

PURPOSE: To easily retrieve a data base and to acquire desired information even by a person having little knowledge for the structure and content of the data base .

CONSTITUTION: When ( retrieval based on inference) is selected by using a mouse 11 on an initial screen displayed on a display 13, an intake screen to inquire the summary of the bodily status of a person to be helped is displayed. When a user answers to it, the inference is performed by an inference device 20, thence, an inference rule to be executed is selected. Those inference rules include self-reliance help level evaluation, help main person level evaluation, help supporter level evaluation, etc. Inquiry display and answer input of interactive format in an input/output console 10 are performed , and a selected inference rule is executed. A service retrieval code is introduced based on an inference result, thereby, a service master in the data base 32 is retrieved . It follows that the kind of service in accordance with the state of the person to be helped and status surrounding the person to be helped can be provided.

12/5/18 (Item 18 from file: 347)  
DIALOG(R)File 347:JAPIO  
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03555627 \*\*Image available\*\*  
PLAN-TYPE INFERENCE DEVICE

PUB. NO.: 03-218527 [JP 3218527 A]  
PUBLISHED: September 26, 1991 (19910926)  
INVENTOR(s): TANAKA MASAYUKI  
KOMINAMI TAIZO  
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company  
or Corporation), JP (Japan)  
APPL. NO.: 01-132340 [JP 89132340]  
FILED: May 25, 1989 (19890525)  
INTL CLASS: [5] G06F-009/44 ; G06F-015/21  
JAPIO CLASS: 45.1 (INFORMATION PROCESSING -- Arithmetic Sequence Units);  
45.4 (INFORMATION PROCESSING -- Computer Applications)  
JOURNAL: Section: P, Section No. 1290, Vol. 15, No. 503, Pg. 125,  
December 19, 1991 (19911219)

#### ABSTRACT

PURPOSE: To attain high speed plan correction by using alteration data as an input, retrieving only a part influenced by means of alteration data in a previously planned result to automatically correct it.

CONSTITUTION: This device is provided with a data base 1 storing plan data and alteration data, a knowledge base 2 storing a procedure required for the generation and the alteration of the plan and a working memory 7

which tentatively stores the result on the way of inference. Further the device is provided with an inference engine 6 having a plan generation procedure 4 generating the plan and a local plan generation procedure 5 altering the plan based on the **data base** 1, the knowledge base 2 and the working memory 7, and a central proceeding unit 10 controlling the whole. When the plan is altered, the part influenced by alteration data is **retrieved** from the working memory 7 and the object of alteration is eliminated. Then, the plan generation procedure is recursively executed to alter the **plan**. Thus, the **plan** can **efficiently** be altered.

12/5/21 (Item 21 from file: 347)  
DIALOG(R)File 347:JAPIO  
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02387433 \*\*Image available\*\*  
EXPERT SYSTEM

PUB. NO.: 63-004333 [JP 63004333 A]  
PUBLISHED: January 09, 1988 (19880109)  
INVENTOR(s): IKEDA JUN  
FUKUMOTO AKIRA  
TAI ICHIRO  
APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 61-147678 [JP 86147678]  
FILED: June 24, 1986 (19860624)  
INTL CLASS: [4] **G06F-007/28 ; G06F-009/44**  
JAPIO CLASS: 45.1 (INFORMATION PROCESSING -- Arithmetic Sequence Units);  
45.2 (INFORMATION PROCESSING -- Memory Units)  
JOURNAL: Section: P, Section No. 715, Vol. 12, No. 203, Pg. 56, June  
11, 1988 (19880611)

#### ABSTRACT

PURPOSE: To improve **rule retrieval efficiency** by calculating a frequency which is used so far for deduction for each rule in a **data base** and setting the order of **rule retrieval** according to the used frequency.

CONSTITUTION: A **rule retrieval efficiency** increasing mechanism 5 stores the use frequencies (f) of all diagnostic rules (r). When a signal for the use of some diagnostic rule ri is received from a deduction mechanism 2, '1' is added to the use frequency fi of the diagnostic rule ri to update the use frequency fi. When the frequency is updated, the use frequency fj of a diagnostic rule rj having priority Pi-1 which is one higher than application priority Pi set currently for the diagnostic rule ri is read out and the read use frequency fj of the diagnostic rule ri is compared with the use frequency fi of the updated diagnostic rule ri; when fj<fi, the application priority of the rule ri is set to Pi-1 and the application priority of the rule rj is set to Pi.

12/5/36 (Item 15 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014111890  
WPI Acc No: 2001-596102/200167  
XRPX Acc No: N01-444352

**Method of optimizing the processing of enquiries to a database by detecting patterns in SQL enquiry statements which indicate search limits and converting the patterns to keys to limit database searches**

Patent Assignee: BULL HN INFORMATION SYSTEMS INC (HONE )

Inventor: GRAY J E

Number of Countries: 021 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200146864	A1	20010628	WO 2000US34992	A	20001222	200167 B

US 6353821 B1 20020305 US 99472362 A 19991223 200224  
EP 1242920 A1 20020925 EP 2000988283 A 20001222 200271  
WO 2000US34992 A 20001222

Priority Applications (No Type Date): US 99472362 A 19991223

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200146864 A1 E 40 G06F-017/30

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU

MC NL PT SE TR

US 6353821 B1 G06F-017/30

EP 1242920 A1 E G06F-017/30 Based on patent WO 200146864

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI

LU MC NL PT SE TR

Abstract (Basic): WO 200146864 A1

NOVELTY - WHERE clauses in a **search query** are converted to Conjunctive Normal Form (CNF) lists. Conditions used to access a current table are extracted and a check is made to determine whether more table indexes are to be examined. Key conditions are gathered into an OR-group versus Key Column matrix and checks are made for multi-column index range condition patterns. The best method found is then saved. When all indexes have been examined the best access method found is located and a composite key value is built and a multi-column index accessed using a range condition compare operator. DeMorgan's theorem may be used.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for

(a) **database** management software system

(b) an optimizer for a **database** management software system

(c) and a computer readable medium carrying instructions for a software **database** management optimizer.

USE - **Database** accessing.

ADVANTAGE - **Effectively** finds the most **efficient** access plan .

pp; 40 DwgNo 0/7

Title Terms: METHOD; OPTIMUM; PROCESS; ENQUIRY; **DATABASE** ; DETECT; PATTERN ; SQL; ENQUIRY; STATEMENT; INDICATE; **SEARCH** ; LIMIT; CONVERT; PATTERN; KEY; LIMIT; **DATABASE** ; **SEARCH**

Derwent Class: T01

International Patent Class (Main): **G06F-017/30**

File Segment: EPI

12/5/37 (Item 16 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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014072259 \*\*Image available\*\*

WPI Acc No: 2001-556472/200162

Related WPI Acc No: 2000-105189

XRPX Acc No: N01-413452

Query **executing method in relational database management system, involves optimizing access path for query by determining optimal filter factor using value of each variable in query**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: HADERLE D J; MUKAI J; NAKAGAWA R M; TIE H S

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6219660	B1	20010417	US 97940245	A	19970930	200162 B
			US 99392151	A	19990908	

Priority Applications (No Type Date): US 97940245 A 19970930; US 99392151 A 19990908

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 6219660 B1 9 G06F-017/30 Cont of application US 97940245

Cont of patent US 6006220



Abstract (Basic): US 6219660 B1

NOVELTY - A **query** containing variables is received and access path for that **query** is determined during bind process based on default filter factor. During execution of **query**, access path is optimized, by determining optimal filter factor using value of each variable in **query**. A new access path is generated using optimal filter factor, by disregarding previously generated access path based on default filter factor.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) **Query** executing system;
- (b) **Query** executing program

USE - For **retrieving** variables from structured **query** language (SQL) in relational **database** management system (RDBMS).

ADVANTAGE - Enables selecting on optimal access path for SQL statement using a **query** compiler. The **query** compiler selects more optimal **query** execution **plan**, hence **query** **performance** for SQL with variables is greatly improved.

DESCRIPTION OF DRAWING(S) - The figure shows the flow diagram explaining improved access path determining method.

pp; 9 DwgNo 2/4

Title Terms: **QUERY**; EXECUTE; METHOD; RELATED; **DATABASE**; MANAGEMENT; SYSTEM; ACCESS; PATH; **QUERY**; DETERMINE; OPTIMUM; FILTER; FACTOR; VALUE; VARIABLE; **QUERY**

Derwent Class: T01

International Patent Class (Main): G06F-017/30

File Segment: EPI

12/5/38 (Item 17 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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014056178 \*\*Image available\*\*

WPI Acc No: 2001-540391/200160

IRPX Acc No: N01-401523

**Query -plan modification method for computer implemented database management system, involves identifying generated transient views improving performance of query - plan**

Patent Assignee: INT BUSINESS MACHINES CORP (IBM )

Inventor: SUBRAMANIAN N I; VENKATARAMAN S

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6275818	B1	20010814	US 9763979	A	19971106	200160 B
			US 98186804	A	19981105	

Priority Applications (No Type Date): US 9763979 P 19971106; US 98186804 A 19981105

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6275818	B1	24	G06F-007/00	Provisional application	US 9763979

Abstract (Basic): US 6275818 B1

NOVELTY - Equivalence classes containing similar sub-plans of **query** -plan are generated. Transient views containing a union of results from all equivalence class associated sub-plans, are generated. The transient views improving **query** - **plan** **performance** are identified and results for each associated equivalence class sub-plan, are obtained by filtering the identified views.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for **queries** optimizing apparatus.

USE - For optimizing **queries** in computer implemented **database** management system.

ADVANTAGE - By identifying transient views improving **query** plan, new **query** **plan** resulting in improved **query** **performance** is efficiently generated. Provides efficient **query** optimizing technique

that can be implemented over existing **query** processing system in non-intrusive manner.

DESCRIPTION OF DRAWING(S) - The figure shows the flow diagram illustrating the steps performed by cost based optimizer to identify execution steps for efficient **query** processing.

pp; 24 DwgNo 7/11

Title Terms: **QUERY** ; **PLAN**; **MODIFIED**; **METHOD**; **COMPUTER**; **IMPLEMENT**;  
**DATABASE** ; **MANAGEMENT**; **SYSTEM**; **IDENTIFY**; **GENERATE**; **TRANSIENT**; **VIEW**;  
**IMPROVE**; **PERFORMANCE**; **QUERY** ; **PLAN**

Derwent Class: T01

International Patent Class (Main): **G06F-007/00**

File Segment: EPI

12/5/41 (Item 20 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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013995467 \*\*Image available\*\*

WPI Acc No: 2001-479682/200152

XRPX Acc No: N01-355184

**Information retrieval procedure for electronic program guide in television broadcasting, involves searching data, assigning score to data, correcting score according to search condition, for judging output of data**

Patent Assignee: VICTOR CO OF JAPAN (VICO )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2001175675	A	20010629	JP 99360433	A	19991220	200152 B

Priority Applications (No Type Date): JP 99360433 A 19991220

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 2001175675	A		5 G06F-017/30	

Abstract (Basic): JP 2001175675 A

NOVELTY - Several data which are **retrieved** sequentially from a **database** , are **searched** based on keywords and **search** conditions of logical operator that connects several keywords, and a score is assigned. The score is corrected according to **search** conditions which show the degree of importance of logical operators connecting the **search** conditions. Based on the corrected score, it is judged whether data is output or not.

USE - For **retrieving** information from electronic program guide used in television broadcast.

ADVANTAGE - The degree of importance is changeable for every **search filter** . **Search** can be **performed** flexibly, **efficiently** and easily such that priority is given to certain user over other user.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart of information **retrieval** procedure. (Drawing includes non-English language text).

pp; 5 DwgNo 2/2

Title Terms: **INFORMATION**; **RETRIEVAL** ; **PROCEDURE**; **ELECTRONIC**; **PROGRAM**;  
**GUIDE**; **TELEVISION**; **BROADCAST**; **SEARCH** ; **DATA**; **ASSIGN**; **SCORE**; **DATA**;  
**CORRECT**; **SCORE**; **ACCORD**; **SEARCH** ; **CONDITION**; **JUDGEMENT**; **OUTPUT**; **DATA**

Derwent Class: T01

International Patent Class (Main): **G06F-017/30**

International Patent Class (Additional): H04N-005/445

File Segment: EPI

12/5/54 (Item 33 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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011997378 \*\*Image available\*\*

WPI Acc No: 1998-414288/199835  
Related WPI Acc No: 1998-348746  
XRPX Acc No: N98-322403

**Database query optimisation system - Detects redundant expressions  
based on expression group attributes**

Patent Assignee: TANDEM COMPUTERS INC (TAND )  
Inventor: CELIS P; VAISHNAV J; ZELLER H; GRAEFE G  
Number of Countries: 020 Number of Patents: 003  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9832064	A2	19980723	WO 97US23087	A	19971215	199835 B
US 5819255	A	19981006	US 96702106	A	19960823	199847
			US 96763407	A	19961211	
			US 96773695	A	19961227	
US 5822747	A	19981013	US 96702106	A	19960823	199848

Priority Applications (No Type Date): US 96773695 A 19961227; US 96702106 A 19960823; US 96763407 A 19961211

Cited Patents: No-SR.Pub

**Patent Details:**

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9832064	A2	E	81	G06F-000/00	
Designated States (National): CA JP					
Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
US 5819255	A			G06F-017/30	Div ex application US 96702106 CIP of application US 96763407
US 5822747	A			G06F-017/30	

Abstract (Basic): WO 9832064 A

The system represents the **database query** as a **query tree** including one or more levels of logical expressions, each including zero or more logical expressions as inputs. a subset of the inputs represents one or more subtrees, each having a top logical expression and zero or more logical expressions as inputs.

Each level other than the top has one or more logical expressions which are input to a higher level logical expression at a preceding level. Group attributes are then found for each logical expression in a **query tree**.

ADVANTAGE - Generates optimal **plan** for executing **database query**, provides **efficient** storage compaction scheme for **search** data structure when **searching** for optimal plan for **database query**; avoids generation of redundant expressions when **searching** for optimal plan for **database query**.

Dwg.4/15

Title Terms: **DATABASE**; **QUERY**; **OPTIMUM**; **SYSTEM**; **DETECT**; **REDUNDANT**; **EXPRESS**; **BASED**; **EXPRESS**; **GROUP**; **ATTRIBUTE**

Derwent Class: T01

International Patent Class (Main): **G06F-000/00**; **G06F-017/30**

File Segment: EPI

12/5/59 (Item 38 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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010716353 \*\*Image available\*\*

WPI Acc No: 1996-213308/199622

Related WPI Acc No: 2000-186682; 2000-202030; 2000-202031

XRPX Acc No: N96-178738

**Data analysis method using information storage device such as database device - involves searching of rule with large evaluation scale among multiple generated rules which is then output**

Patent Assignee: HITACHI LTD (HITA ); ASHIDA H (ASHI-I); ITO Y (ITOY-I); MAEDA A (MAED-I); TAKAHASHI Y (TAKA-I); TANIGUCHI Y (TANI-I)  
Inventor: ASHIDA H; ITO Y; MAEDA A; TAKAHASHI Y; TANIGUCHI Y  
Number of Countries: 002 Number of Patents: 004  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8077010	A	19960322	JP 94239437	A	19940907	199622 B
US 5761389	A	19980602	US 95470217	A	19950606	199829
US 5940815	A	19990817	US 95470217	A	19950606	199939
			US 97993150	A	19971218	
US 6321217	B1	20011120	US 95470217	A	19950606	200174
			US 97993150	A	19971218	
			US 99301595	A	19990429	

Priority Applications (No Type Date): JP 94239437 A 19940907

#### Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 8077010	A		20	G06F-009/44	
US 5761389	A			G06F-017/00	
US 5940815	A			G06F-015/18	Cont of application US 95470217
					Cont of patent US 5761389
US 6321217	B1			G06F-017/00	Cont of application US 95470217
					Cont of application US 97993150
					Cont of patent US 5761389
					Cont of patent US 5940815

#### Abstract (Basic): JP 8077010 A

The method involves usage of numerical data stored in a **database** (404). An user interface modem (401) enables user to perform specification and correction of parameter required for processing. The generated rule expressing the future of data that is output from a work file (405) is stored in a rule file (407). An execution model (403) uses contents of the rule file and the **database**. Among data items, the data used in the condition node and the conclusion node of rule is selected. When selected data item possesses numerical value, then, the numerical value is converted into symbol value.

Multiple rules expression relation between data items in rule format, is generated. An evaluation scale is computed by which the strength of relation between the data items is calculated. Among many generated candidate rules, a candidate rule with large evaluation state is **searched** and then the **searched** candidate rule is made to output.

ADVANTAGE - Performs optimisation of rule. Expresses feature of data with sufficient accuracy. Provides analysis technique with sufficient versatility. Improves work **efficiency**. Generates required **rule** at high speed.

Dwg.4/16

Title Terms: DATA; ANALYSE; METHOD; INFORMATION; STORAGE; DEVICE; **DATABASE**; DEVICE; **SEARCH**; RULE; EVALUATE; SCALE; MULTIPLE; GENERATE; RULE; OUTPUT

Derwent Class: T01

International Patent Class (Main): **G06F-009/44** ; **G06F-015/18** ; **G06F-017/00**

International Patent Class (Additional): **G06F-017/60** ; **G06F-019/00**

File Segment: EPI

12/5/65 (Item 44 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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009765009 \*\*Image available\*\*

WPI Acc No: 1994-044860/199406

XRPX Acc No: N94-035555

**Information retrieval in distributed database management system - manages data access among multiple relational databases in distributed network environment**

Patent Assignee: HEWLETT-PACKARD CO (HEWP )

Inventor: DU W; KRISHNAMURTHY R; SHAN M; SHAN M-C

Number of Countries: 003 Number of Patents: 005

#### Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2269921	A	19940223	GB 9316517	A	19930809	199406 B
DE 4323947	A1	19940224	DE 4323947	A	19930716	199409
US 5412806	A	19950502	US 92932426	A	19920820	199523

GB 2269921	B	19960103	GB 9316517	A	19930809	199604
DE 4323947	C2	19980129	DE 4323947	A	19930716	199808

Priority Applications (No Type Date): US 92932426 A 19920820

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2269921	A		71	G06F-015/40	
DE 4323947	A1		38	G06F-015/403	
US 5412806	A		33	G06F-015/16	
DE 4323947	C2		37	G06F-017/30	
GB 2269921	B			G06F-017/30	

Abstract (Basic): GB 2269921 A

The system includes a first **database** machine incorporating a first relational **database** management system (DBMS) and accompanying **database** . A second **database** machine incorporates a relational DBMS and accompanying **database** . The two DBMS are different but conform at least to a predetermined structured **query** language (SQL).

An electronic bidirectional communications between the different **database** machines. The communication means for sending and receiving an electronic message to and from any of the **database** machines, the message is containing data defining a **database query** . A data access cost model optimises **queries** in each **database** in the system.

USE/ADVANTAGE - For successfully optimising and executing **database queries** in heterogeneous DBMS. Requires minimal knowledge of physical performance or operational models for each **database** managers.

Dwg.1/16

Title Terms: INFORMATION; **RETRIEVAL** ; DISTRIBUTE; **DATABASE** ; MANAGEMENT; SYSTEM; MANAGE; DATA; ACCESS; MULTIPLE; RELATED; DISTRIBUTE; NETWORK; ENVIRONMENT

Derwent Class: T01

International Patent Class (Main): **G06F-015/16** ; **G06F-015/40** ;

**G06F-015/403** ; **G06F-017/30**

File Segment: EPI

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16/5/9 (Item 7 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014876359 \*\*Image available\*\*  
WPI Acc No: 2002-697065/200275  
XRPX Acc No: N02-549554

**Aggregation determination method for online analytical processing database system, involves maintaining set of usage statistics for multiple queries**

Patent Assignee: MICROSOFT CORP (MICT )  
Inventor: NETZ A; PASUMANSKY M  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6438537	B1	20020820	US 99337226	A	19990622	200275 B

Priority Applications (No Type Date): US 99337226 A 19990622

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6438537	B1		17	G06F-017/30	

Abstract (Basic): US 6438537 B1

NOVELTY - A set of usage **statistics** including the number of times each **query** is issued is maintained for multiple **queries**. A set of aggregations that provide answer to the **queries** is determined based on the usage statistics.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) Computer readable medium storing aggregation determination program; and

(2) Computerized system.

USE - For determining aggregations in online analytical processing (OLAP) **database** system.

ADVANTAGE - By maintaining usage statistics, the weighted benefit/cost ratio that the OLAP **database** system uses to determine the candidate aggregations to be instantiated is determined automatically, hence computing resources are used efficiently.

DESCRIPTION OF DRAWING(S) - The figure shows a system-level overview of the usage based optimization system.

pp; 17 DwgNo 2/6

Title Terms: AGGREGATE; DETERMINE; METHOD; ANALYSE; PROCESS; **DATABASE** ;  
SYSTEM; MAINTAIN; SET; STATISTICAL; MULTIPLE; **QUERY**

Derwent Class: T01

International Patent Class (Main): **G06F-017/30**

File Segment: EPI

16/5/10 (Item 8 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014860546 \*\*Image available\*\*  
WPI Acc No: 2002-681252/200273  
XRPX Acc No: N02-537718

**Computer system has query analyzer for displaying execution plan and percentage execution cost of database query in form of tree structure**

Patent Assignee: MICROSOFT CORP (MICT )  
Inventor: KIERNAN C L; MACLEOD S P; VASANDANI M  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6434545	B1	20020813	US 98213069	A	19981216	200273 B

Priority Applications (No Type Date): US 98213069 A 19981216

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6434545	B1		18	G06F-017/00	

Abstract (Basic): US 6434545 B1

NOVELTY - A **query** analyzer displays a tree structure comprising nodes representing respective operations of the **query** execution plan and a percentage execution cost, for **database query** received by a user interface from a user input device. The analyzer prompts a user to add **database** column index and **database** statistics, on detecting absence of the **database** column index and statistics.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for graphical cost analysis method of user specified **query**.

USE - Computer system with graphical **database query** analyzer.

ADVANTAGE - The **query** analyzer displays an intuitive, graphical representation of **query** execution including detailed computational cost **statistics**, effectively, hence facilitates semiautomatic enhancement of **query** performance.

DESCRIPTION OF DRAWING(S) - The figure shows a high level flow diagram explaining cost analysis of user specified **query**.

pp; 18 DwgNo 10/11

Title Terms: COMPUTER; SYSTEM; **QUERY**; ANALYSE; DISPLAY; EXECUTE; PLAN; PERCENTAGE; EXECUTE; COST; **DATABASE**; **QUERY**; FORM; TREE; STRUCTURE

Derwent Class: T01

International Patent Class (Main): G06F-017/00

File Segment: EPI

16/5/11 (Item 9 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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014787052 \*\*Image available\*\*

WPI Acc No: 2002-607758/200265

Related WPI Acc No: 2002-402258

XRPX Acc No: N02-481319

**Database management system for computer network, selects executable procedures using automatically generated statistical results obtained from executed data**

Patent Assignee: MICROSOFT CORP (MICT )

Inventor: ELLIS N R; KLINE R N

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020087518	A1	20020704	US 98213087	A	19981216	200265 B
			US 200134806	A	20011226	

Priority Applications (No Type Date): US 98213087 A 19981216; US 200134806 A 20011226

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20020087518 A1 21 G06F-007/00 Cont of application US 98213087

Abstract (Basic): US 20020087518 A1

NOVELTY - A **query** optimizer automatically generates **statistical** data derived from the data executed under different procedures. The executable procedure is selected based on the statistical results to access various data in the **database**.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) Executable procedure selection method;
- (2) Computer storing executable instructions for operating **query** optimizer;
- (3) Statistical result accumulation avoiding method;
- (4) Statistical result generation method; and
- (5) Computer-readable medium storing computer-executable instructions.

USE - E.g. relational **database** management system (RDBMS) for computer network like LAN, WAN, Internet.

ADVANTAGE - Ensures reliable and efficient rendering of **database** system due to automatic selection of statistical results.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of

the computer system.

pp; 21 DwgNo 1/11

Title Terms: **DATABASE** ; MANAGEMENT; SYSTEM; COMPUTER; NETWORK; SELECT;  
EXECUTE; PROCEDURE; AUTOMATIC; GENERATE; STATISTICAL; RESULT; OBTAIN;  
EXECUTE; DATA

Derwent Class: T01; W01

International Patent Class (Main): **G06F-007/00**

File Segment: EPI

**16/5/12 (Item 10 from file: 350)**

DIALOG(R) File 350:Derwent WPIX

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014786021 \*\*Image available\*\*

WPI Acc No: 2002-606727/200265

Related WPI Acc No: 2002-402065

XRPX Acc No: N02-480400

**Computer system, includes relational database system which determines  
an appropriate approach to use in processing the SQL command based on the  
generated statistic**

Patent Assignee: INT BUSINESS MACHINES CORP (IBM )

Inventor: BUI T; EGAN R L; KATHMANN K J; RICARD G R

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6405187	B1	20020611	US 99336488	A	19990618	200265 B
			US 99361868	A	19990727	
			US 99393530	A	19990910	

Priority Applications (No Type Date): US 99393530 A 19990910; US 99336488 A  
19990618; US 99361868 A 19990727

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6405187	B1	15	G06F-017/30	CIP of application US 99336488 CIP of application US 99361868

Abstract (Basic): US 6405187 B1

NOVELTY - A main memory (120) contains an encoded vector index (EVI) (126) which provides data necessary to count the number of records in a **database** that match the criteria provided by a standard **query** language function. A relational **database** system (123) processes EVI symbol table entries to generate a **statistic** for a user **query** having an SQL command specifying a criterion.

DETAILED DESCRIPTION - The relational **database** system determines an appropriate approach to use in processing the SQL command based on the generated statistic. An INDEPENDENT CLAIM is also included for a method in processing an SQL command.

USE - Computer system.

ADVANTAGE - Significantly improves performance of SQL functions through the use of an encoded vector index. Provides efficient generation of statistics by sequentially scanning through the entries of an EVI symbol table. Statistics are returned without the need to invoke alternate **database** indexes, and without the need to use other statistic generating methods.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the computer system.

Main memory (120)

Relational **database** system (123)

Encoded vector index (126)

pp; 15 DwgNo 1/8

Title Terms: COMPUTER; SYSTEM; RELATED; **DATABASE** ; SYSTEM; DETERMINE;  
APPROPRIATE; APPROACH; PROCESS; SQL; COMMAND; BASED; GENERATE;  
STATISTICAL

Derwent Class: T01

International Patent Class (Main): **G06F-017/30**

File Segment: EPI



16/5/24 (Item 22 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014087611 \*\*Image available\*\*  
WPI Acc No: 2001-571825/200165  
XRPX Acc No: N01-426141

Execution method for query with criterion in database system involves  
using relative tensor for carrying-out query in memory of computer  
system based on produced statistics, in order to process query

Patent Assignee: INT BUSINESS MACHINES CORP (IBM)  
Inventor: AMUNDSEN L C; KATHMANN K J; SANTOSUOSSO J M  
Number of Countries: 002 Number of Patents: 002  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 10056765	A1	20010607	DE 1056765	A	20001111	200165 B
US 6442539	B1	20020827	US 99441737	A	19991117	200259

Priority Applications (No Type Date): US 99441737 A 19991117  
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 10056765	A1		59	G06F-017/30	
US 6442539	B1			G06F-017/30	

Abstract (Basic): DE 10056765 A1

NOVELTY - The processing of the relative tensors with several orders is performed in order to generate the statistics to the criterion in a user query. The relative tensor is used to carry-out a query in the memory of a computer system from two possible approaches based on the produced statistics, in order to process the query.

DETAILED DESCRIPTION - The predetermined orders of the relative tensors correspond to the individual attributes and coordinates corresponding to the evaluation of the relevant attributes along the order of the relative tensors and the numeric values at the coordinate positions of the relative tensor. The attribute values correspond to the coordinates of the numeric value along the orders of the relative tensor. INDEPENDENT CLAIMS are also included for the following:

- (a) a relative tensor generation method;
- (b) a query execution device;
- (c) a relative tensor generation device;
- (d) and a signal carrier medium.

USE - For generating statistics used for administering and executing queries in relational database.

ADVANTAGE - Enables storage representations in various contexts in order to increase production of relational database management system (RDBMS) system. Enables producing relative tensor for identifying results of limitation operation.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart of process for performing limitation operation applicable on a relative tensor presenting data to generate statistics for limitation operation (drawing includes non-English language text).

pp; 59 DwgNo 4/9

Title Terms: EXECUTE; METHOD; QUERY; CRITERIA; DATABASE; SYSTEM;  
RELATIVE; TENSOR; CARRY; QUERY; MEMORY; COMPUTER; SYSTEM; BASED;  
PRODUCE; STATISTICAL; ORDER; PROCESS; QUERY

Derwent Class: T01

International Patent Class (Main): G06F-017/30

International Patent Class (Additional): G06F-017/00

File Segment: EPI

16/5/25 (Item 23 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014003824 \*\*Image available\*\*  
WPI Acc No: 2001-488038/200153

Related WPI Acc No: 2000-181694  
XRPX Acc No: N01-361116

**Database management method in computer system, involves generating summary table creation recommendation based on query statistics and accordingly creating summary table**

Patent Assignee: ORACLE CORP (ORAC-N)  
Inventor: CAVE S D; LAVENDER R L; OSBORN A P  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6249791	B1	20010619	US 97962029	A	19971031	200153 B
			US 99314457	A	19990518	

Priority Applications (No Type Date): US 97962029 A 19971031; US 99314457 A 19990518

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6249791	B1	17	G06F-017/30	Cont of application US 97962029
				Cont of patent US 6023695

Abstract (Basic): US 6249791 B1

NOVELTY - **Query statistics** indicating execution time and frequency of **query**, is generated for each of the **queries** submitted to a **database** system and stored in local statistics table. A summary table creation recommendation is generated based on the stored **query statistics**. A summary table is created automatically based on the generated summary table creation recommendation.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for recording medium storing **database** management program.

USE - For management of **database** such as relational **database** in computer systems.

ADVANTAGE - As summary tables can be created automatically, faster **searching** and **retrieval** of data is achieved using minimum system resources.

DESCRIPTION OF DRAWING(S) - The figure shows the flow chart depicting methodology for creating **database** summary table.

pp; 17 DwgNo 5/7

Title Terms: **DATABASE**; MANAGEMENT; METHOD; COMPUTER; SYSTEM; GENERATE; SUMMARY; TABLE; CREATION; BASED; **QUERY**; STATISTICAL; ACCORD; SUMMARY; TABLE

Derwent Class: T01

International Patent Class (Main): **G06F-017/30**

File Segment: EPI

**16/5/36 (Item 34 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

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012889906 \*\*Image available\*\*

WPI Acc No: 2000-061740/200005

Related WPI Acc No: 2001-540354

XRPX Acc No: N00-048431

**Query optimization method in database management system**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )  
Inventor: BEAVIN T A; IYER B R; SHIBAMIYA A; TIE H S; WANG M  
Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5995957	A	19991130	US 97808521	A	19970228	200005 B

Priority Applications (No Type Date): US 97808521 A 19970228

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5995957	A	17	G06F-017/30	

Abstract (Basic): US 5995957 A

NOVELTY - Data is divided into several evenly distributed sub

2  
ranges, and number of rows between two given values are indicated in a column table. Percentage of occurrence of a specific value from among several values and number of distinct values, is determined.

DETAILED DESCRIPTION - Several columns of the table are selected and relationship among them is determined and stored to a table. The number of rows which satisfy **search** conditions specified by the **query** is determined.

INDEPENDENT CLAIMS are included for:

- (1) a **database** management system; and
- (2) a computer readable medium, containing a program product.

USE - In determining optimized access paths.

ADVANTAGE - Performance for **queries** that have predicates on multiple columns of table is improved. Problem caused by column correlation during **query** optimization is reduced by removing independence assumption when new type of multicolumn **statistics** is available. Number of qualified rows of **query** is estimated and **query** is optimized.

DESCRIPTION OF DRAWING(S) - The figure shows process flow of system, method and program product.

pp; 17 DwgNo 6A, 6B/6

Title Terms: **QUERY** ; **METHOD**; **DATABASE** ; **MANAGEMENT**; **SYSTEM**

Derwent Class: T01

International Patent Class (Main): **G06F-017/30**

File Segment: EPI

16/5/41 (Item 39 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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012337087 \*\*Image available\*\*

WPI Acc No: 1999-143194/199912

Related WPI Acc No: 1999-143197; 2000-105922; 2000-106382; 2000-125904

XRPX Acc No: N99-104013

**Apparatus for use in information retrieval system for retrieving stored documents from repository - ranks documents in output set as predefined function of first logical form of query and second logical form for each document in output set and provides ranked output containing stored entries associated with output document set**

Patent Assignee: MICROSOFT CORP (MICT ); MICROSOFT CORP (MICR-N)

Inventor: BRADEN-HARDER L; CORSTON S H; DOLAN W B; VANDERWENDE L H

Number of Countries: 022 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9905618	A1	19990204	WO 98US9711	A	19980513	199912 B
US 5933822	A	19990803	US 97898652	A	19970722	199937
EP 996899	A1	20000503	EP 98922234	A	19980513	200026
			WO 98US9711	A	19980513	
JP 2001511564	W	20010814	WO 98US9711	A	19980513	200154
			JP 2000504525	A	19980513	
CN 1302412	A	20010704	CN 98808395	A	19980513	200158

Priority Applications (No Type Date): US 97898652 A 19970722

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 9905618	A1	E	107	G06F-017/30	
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Designated States (National): CN JP

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU

MC NL PT SE

US 5933822	A			G06F-017/00	
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EP 996899	A1	E		G06F-017/30	Based on patent WO 9905618
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Designated States (Regional): AT BE CH DE ES FR GB IE IT LI LU MC NL

JP 2001511564	W		94	G06F-017/30	Based on patent WO 9905618
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CN 1302412	A			G06F-017/30	
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Abstract (Basic): WO 9905618 A

NOVELTY - The apparatus employs natural language processing to improve the accuracy of a keyword based document **search** performed by,

for example, a statistical web **search engine** (20), by the production, comparison and weighting of matching logical forms associated with a **search query** and each of the **retrieved** documents (35). DETAILED DESCRIPTION - Apparatus includes a processor and a memory with stored executable instructions, which instructs the processor. It produces in response to a **query** a logical form portraying semantic relationships between words associated with the **query**. A corresponding second logical form for each different document in the output document set is obtained, this form portrays the semantic relationships between words associated with a phrase in the document.

USE - For providing apparatus and accompanying methods for an information **retrieval** system utilising natural language processing to process results **retrieved** by, for example, an information **retrieval** engine such as a conventional **statistical** based **search engine**, in order to improve overall precision. DESCRIPTION OF DRAWING(S) - The drawing shows depicts a very high level block diagram of an information **retrieval** system 5. (20) **retrieval engine**; (35) **retrieved** documents.

Dwg.1/12

Title Terms: APPARATUS; INFORMATION; **RETRIEVAL** ; SYSTEM; **RETRIEVAL** ; STORAGE; DOCUMENT; **REPOSITORY** ; RANK; DOCUMENT; OUTPUT; SET; PREDEFINED; FUNCTION; FIRST; LOGIC; FORM; **QUERY** ; SECOND; LOGIC; FORM; DOCUMENT; OUTPUT; SET; RANK; OUTPUT; CONTAIN; STORAGE; ENTER; ASSOCIATE; OUTPUT; DOCUMENT; SET

Derwent Class: T01

International Patent Class (Main): G06F-017/00 ; G06F-017/30

File Segment: EPI

16/5/43 (Item 41 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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012089340 \*\*Image available\*\*

WPI Acc No: 1998-506251/199843

XRFX Acc No: N98-394706

**Search optimising method in multimedia database - involves processing and evaluating ranking expression in same procedure as that of filter condition**

Patent Assignee: HEWLETT-PACKARD CO (HEWP )

Inventor: CHAUDHURI S; GRAVANO L

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5806061	A	19980908	US 97859556	A	19970520	199843 B

Priority Applications (No Type Date): US 97859556 A 19970520

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5806061	A		20	G06F-017/00	

Abstract (Basic): US 5806061 A

The method involves optimizing a **filter** condition containing several sub conditions. A **statistics** from a **database** is accessed based on suitable information cost to process a particular sub condition. A sub condition to be processed is selected based on the cost information. A **query** to the selected sub condition is send to **retrieve** all the objects satisfying sub condition from the multimedia **database**.

Other sub conditions on the **retrieved** objects are evaluated. A ranking expression is translated into filter condition by processing the expression in the same procedure as that of the condition.

ADVANTAGE - **Retrieves** sufficient number of objects, thereby minimizing cost of **search**. Improves work efficiency.

Dwg.2/9

Title Terms: **SEARCH** ; OPTIMUM; METHOD; **DATABASE** ; PROCESS; EVALUATE; RANK ; EXPRESS; PROCEDURE; FILTER; CONDITION

Derwent Class: T01

File 348:EUROPEAN PATENTS 1978-2003/Jun W01

(c) 2003 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20030529,UT=20030522

(c) 2003 WIPO/Univentio

Set	Items	Description
S1	1380543	RULE? ? OR TEMPLATE? ? OR STRATEGY OR STRATEGIES OR FILTER? ? OR PLAN OR PLANS OR POLICY OR POLICIES OR QUERY OR SEARCH
S2	44235	S1(5N) (PERFORMANCE OR PERFORMED OR PROFICIEN? OR EFFECTIV? OR EFFICIEN? OR SUCCESS?)
S3	2516	S2(5N) (MEASUR? OR ASSESS? OR EVALUAT? OR ANALYZ? OR ANALYS? OR CHECK??? OR GAUG??? OR QUANTIF? OR JUDG???)
S4	1563	S1(10N) STATISTIC? ?
S5	124447	DATABASE? ? OR DATA() BASE? ? OR REPOSITOR??? OR SEARCH() EN- GINE? ?
S6	260	S3(S) S5
S7	159	S3(S) S5(S) (SEARCH??? OR QUER???? OR RETRIEV?)
S8	71	S7 AND IC=G06F
S9	599043	RULE? ? OR TEMPLATE? ? OR STRATEGY OR STRATEGIES OR FILTER? ? OR PLAN OR PLANS OR POLICY OR POLICIES
S10	36178	S9(5N) (PERFORMANCE OR PERFORMED OR PROFICIEN? OR EFFECTIV? OR EFFICIEN? OR SUCCESS?)
S11	235	S10(S) S5(S) (SEARCH??? OR QUER???? OR RETRIEV?) AND IC=G06F
S12	217	S11 NOT S8
S13	48	S12/TI, AB, CM
S14	1661	S9(5N) STATISTIC?
S15	48	S14(S) S5(S) (SEARCH??? OR QUER???? OR RETRIEV?) AND IC=G06F
S16	2639	S9(10N) STATISTIC?
S17	88	S16(S) S5(S) (SEARCH??? OR QUER???? OR RETRIEV?) AND IC=G06F
S18	38	S17 NOT (S8 OR S13 OR S15)

8/5,K/5 (Item 5 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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01245516

A phonetic method of retrieving and presenting electronic information from large information sources, an apparatus for performing the method, a computer-readable medium, and a computer program element

Ein phonetisches Verfahren um elektronische Informationen von grossen Informationsquellen wiederaufzufinden und zu prasentieren, ein Gerat um dieses Verfahren auszufuhren, ein rechnerlesbares Medium, und ein Rechnerprogrammelement

Un procede phonetique pour retrouver et presenter des informations electroniques de grandes sources d'informations, un dispositif pour mettre en oeuvre ce procede, un medium lisible par ordinateur, et un element de programme d'ordinateur

PATENT ASSIGNEE:

Mindpass A/S, (2821340), Vardevej 1, 9220 Aalborg, (DK), (Applicant designated States: all)

INVENTOR:

Fruensgaard, Finn Ove, Vesteråa 9, 9000 Aalborg, (DK)

Kjaersgaard, Jesper, Kvisten 21, 9260 Gistrup, (DK)

LEGAL REPRESENTATIVE:

Wittrup, Flemming et al (61495), Hofman-Bang A/S, Hans Bekkevolds Alle 7, 2900 Hellerup, (DK)

PATENT (CC, No, Kind, Date): EP 1076305 A1 010214 (Basic)

APPLICATION (CC, No, Date): EP 99610045 990813;

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06F-017/30

ABSTRACT EP 1076305 A1

The invention relates to a method of retrieving and presenting electronic information from an information source, said retrieval being based on a search request consisting of one or more given search terms. A selection of a first set of related search terms is performed from a set of possible search terms, said first selection being based on the syntactic resemblance between at least one of said given search terms and said possible search terms. Said given search request is modified in accordance with said set of related search terms, and said retrieval of information is based on said modified search request. A selection of a second set of related search terms from a predefined set of possible search terms is performed in accordance with the phonetic resemblance between each of said at least one of said given search terms and the contents of said set of possible search terms. The search terms to be included in said first set of related search terms are selected from said second set of search terms.

The invention also relates to an apparatus for performing the method, to a computer-readable medium, and to a computer program element.

ABSTRACT WORD COUNT: 194

NOTE:

Figure number on first page: 6

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 010214 A1 Published application with search report

Examination: 011010 A1 Date of request for examination: 20010813

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
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CLAIMS A	(English)	200107	1039
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SPEC A	(English)	200107	6255
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Total word count - document A	7294
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Total word count - document B	0
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Total word count - documents A + B	7294
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INTERNATIONAL PATENT CLASS: G06F-017/30

SPECIFICATION consequence the result of the information retrieval may not be optimal and at worst it may be useless.

It is known to perform a spell **check** on given **search** terms. The spell **check** is **performed** by means of a **repository** including a number of correctly spelled possible **search** terms which can be used as **search** terms when **retrieving** information from the given information source. For example, when the information source holds information about a given technical area the predefined set of possible **search** terms includes terms from the given technical area. A given **search** term from the specified **search** criteria is looked up in a **repository** and is replaced by - or suggested to be replaced by - the term having the highest degree of syntactic resemblance with the given term. Hereby, the actual **search** terms to be used can be selected among the possible **search** terms and the influence of typing errors and spelling errors which might occur in the specified **search** terms can be eliminated or at least be reduced. This method, which often gives a good result, has the drawback of being cumbersome when a large set of possible **search** terms is used, i.e. when the predefined set of possible **search** terms holds a large number of **search** terms.

The object of the invention is to provide a method of retrieving electronic information from an information source, which on the one hand is...

8/5,K/7 (Item 7 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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00966669

**Database query system and method**  
**Datenbanksuchsystem und -verfahren**

**Systeme et methode d'interrogation de bases de donnees**

PATENT ASSIGNEE:

INTERNATIONAL BUSINESS MACHINES CORPORATION, (200123), , Armonk, NY  
10504, (US), (Applicant designated States: all)

INVENTOR:

Carey, Michael J., 1473 Almaden Valley Drive, San Jose, California 95120,  
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LEGAL REPRESENTATIVE:

Davies, Simon Robert (75452), IBM, United Kingdom Limited, Intellectual  
Property Law, Hursley Park, Winchester, Hampshire SO21 2JN, (GB)

PATENT (CC, No, Kind, Date): EP 877328 A2 981111 (Basic)  
EP 877328 A3 000119

APPLICATION (CC, No, Date): EP 98303616 980508;

PRIORITY (CC, No, Date): US 853294 970509; US 853976 970509

DESIGNATED STATES: DE; FR; GB

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06F-017/30

ABSTRACT EP 877328 A2

An object language application (e.g., c++, JAVA, etc.,) is enabled to issue a query over a view and to receive back, as query results, handles to application type objects which can be further manipulated by the application. A view is defined herein as a collection of a view type, and a view type is defined as a class or type. In a preferred embodiment, a tool is used by a programmer writing an application to create object language class definitions that are based upon the view type of the view referenced by the query. Upon receipt of the query referencing a view type, a query engine generates a query plan that builds mock (i.e., proxy) application type objects in memory based upon the view types. The application objects have a form that is consistent with the class definition for a type of object returned as a result. The application can run methods on the application type objects or point to other application type objects from the handles, to the application objects, that are returned to the application; and these manipulations will be understood by the query engine. In a preferred embodiment, query rewrite optimizations are applied to the queries over views requiring object

building in order to optimize the evaluation of the query and the building of view objects as query results. For example, when a query over a view is analyzed and it is determined that the query is not requesting a handle, and is not referencing a method, but only asks for values, no objects are built. Also, if a query traverses a reference type attribute, but the query can be transformed into a join or outer join operation between relational tables, then no object building is required. In these above described situations, the rewritten query can be pushed down to the database management system of the data source for resolution. If the query does request a handle or references a method, then some object building is required. However, query rewrite techniques can still be applied so that parts of the query are pushed down to the DBMS to minimize the number of objects that are built.

ABSTRACT WORD COUNT: 360

NOTE:

Figure number on first page: 9B

LEGAL STATUS (Type, Pub Date, Kind, Text):

Examination: 000830 A2 Date of request for examination: 20000704  
Search Report: 20000119 A3 Separate publication of the search report  
Application: 981111 A2 Published application (Alwith Search Report  
;A2without Search Report)

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9846	1410
SPEC A	(English)	9846	17780
Total word count - document A			19190
Total word count - document B			0
Total word count - documents A + B			19190

INTERNATIONAL PATENT CLASS: G06F-017/30

...SPECIFICATION referred to as a multi-valued view column since it is a collection.

Object-Oriented DBMSs (OODBMSs) offer a seamless integration of application types and **database** types. In contrast with **queries** over relational **databases** that return values that correspond to attributes in the rows of tables, **queries** over Object-Oriented **databases** can return handles to application objects as **query** results. Returning handles on application objects is a problem for **queries** over views. Views are understood by the **query** engine, but have no representation as application types. In the preferred embodiment of this invention, the problem of returning view types as application objects is addressed. The process of rendering application objects from views and view types is referred to herein as "object building". Object building is **performed** under the control of the **query** engine during **query** evaluation. There are two classes of **queries** that are affected by object building: 1) **queries** that return view types as **query** results, and 2) **queries** that invoke methods on view types. Both types of **queries** are addressed in the preferred embodiment of this invention. In addition new **query** rewrite algorithms are used to optimize these **queries**.

DESCRIPTION OF A THREE TIER ENVIRONMENT

Fig. 9A shows a high level view of a three tier environment of the preferred embodiment of this invention...

8/5,K/9 (Item 9 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00907344

Similarity search apparatus for searching unit strings

Ähnlichkeitsrecherchiergerät zum Recherchieren von Einheitszeichenfolgen

Appareil de recherche de similarite pour rechercher des sequences de symboles

PATENT ASSIGNEE:



ATR Interpreting Telecommunications Research Laboratories, (2331380), 5  
Koaza-Sanpeidani, Oaza-Inuidani, Seika-cho, Soraku-gun, Kyoto 619-0288,  
(JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Lepage, Yves, 24-104, Takanohara-ekinishi-danchi, 1-2, Kabutodai,  
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Ando, Shinichi, 1-8-203, Saidaiji-kita-machi 3-chome, Nara-shi, Nara 631,  
(JP)

LEGAL REPRESENTATIVE:

Selting, Gunther, Dipl.-Ing. et al (11092), Patentanwalte von Kreisler,  
Selting, Werner Postfach 10 22 41, 50462 Koln, (DE)

PATENT (CC, No, Kind, Date): EP 828220 A1 980311 (Basic)

APPLICATION (CC, No, Date): EP 97115164 970902;

PRIORITY (CC, No, Date): JP 96233954 960904

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-017/30

ABSTRACT EP 828220 A1

Provided is a similarity search apparatus for searching data at a higher speed than that of the prior art without limiting the types of letter of a search key. A unit position correspondence memory stores therein a table that expresses the ordinal number among units at which each unit in a search key inputted by means of a keyboard has appeared within the search key. A search section refers to the table stored in the unit position correspondence memory and operates every time units are read out one by one from a database memory including a plurality of units to generate a plurality of status parameters each of which includes a similarity, a position of coincidence and a skip number, which express with what number of units from the top of the search key the units read out from the database have coincided at what degree of similarity, and express how many units in the database have been skipped over subsequently. Through the above process, the search section updates each status parameter stored in a status parameter memory and operates upon detecting a unit string coincident at a similarity equal to or lower than an inputted similarity, to output the detected unit string as a unit string of a similarity.

ABSTRACT WORD COUNT: 211

LEGAL STATUS (Type, Pub Date, Kind, Text):

Examination: 021106 A1 Date of dispatch of the first examination  
report: 20020919

Application: 980311 A1 Published application (A1with Search Report  
;A2without Search Report)

Examination: 980311 A1 Date of filing of request for examination:  
970902

Change: 981125 A1 Designated Contracting States (change)

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9811	1107
SPEC A	(English)	9811	12238
Total word count - document A			13345
Total word count - document B			0
Total word count - documents A + B			13345

INTERNATIONAL PATENT CLASS: G06F-017/30

...SPECIFICATION existence of the unit string coincident at a similarity equal to or lower than the inputted similarity is detected. Therefore, outputting as a consequence of **success** of **search** can be effected without **checking** the **search** key to the last part of it. With this arrangement, the similarity **search** process can be executed at a higher speed than that of the prior arts.

Furthermore, according to the similarity search apparatus of the present preferred...

.DIALOG(R)File 348:EUROPEAN PATENTS  
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00875665

**Multimedia database retrieval system**  
**Multimedia-Datenbankwiederauffindungssystem**  
**Systeme de recouvrement de donnees multimedia**  
PATENT ASSIGNEE:

NEC CORPORATION, (236690), 7-1, Shiba 5-chome Minato-ku, Tokyo, (JP),  
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INVENTOR:

Cox, Ingemar J., 21, LeParc Drive, Lawrenceville, NJ 08648, (US)  
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Omohundro, Stephen M., 1012, Hemlock Court, Monmouth Junction, NJ 08852,  
(US)  
Yianilos, Peter N., 215, Arreton Road, Princeton, NJ 08540, (US)

LEGAL REPRESENTATIVE:

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PATENT (CC, No, Kind, Date): EP 802489 A2 971022 (Basic)  
EP 802489 A3 990506

APPLICATION (CC, No, Date): EP 97106304 970416;

PRIORITY (CC, No, Date): US 634313 960416

DESIGNATED STATES: DE; GB

INTERNATIONAL PATENT CLASS: **G06F-017/30**

ABSTRACT EP 802489 A2

A queryless, multimedia database search method incorporating a Bayesian inference engine that refines its answer with each user response. The set of user responses includes of a series of displays and user actions, and is defined by a relatively simple user interface.

ABSTRACT WORD COUNT: 43

LEGAL STATUS (Type, Pub Date, Kind, Text):

Examination: 020102 A2 Date of dispatch of the first examination  
report: 20011119

Application: 971022 A2 Published application (A1with Search Report  
;A2without Search Report)

Change: 020828 A2 Title of invention (French) changed: 20020705

Change: 020828 A2 Title of invention (English) changed: 20020705

Change: 020828 A2 Title of invention (German) changed: 20020705

Search Report: 990506 A3 Separate publication of the European or  
International search report

Examination: 990825 A2 Date of request for examination: 19990624

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9710W3	761
SPEC A	(English)	9710W3	4897
Total word count - document A			5658
Total word count - document B			0
Total word count - documents A + B			5658

INTERNATIONAL PATENT CLASS: **G06F-017/30**

...CLAIMS a database of 3d shapes.

20. The method according to claim 1 wherein the database is a database of text.

21. An interactive method for **measuring the effectiveness** of a **database search**, said method comprising the steps of:  
generating a target object for which to be searched;  
displaying said target object and a set of candidate objects...

8/5,K/12 (Item 12 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00634889

EXPERT SYSTEM WITH FAST PATTERN MATCH DETERMINATION BY EQUIVALENCE CLASS  
PROJECTION MEANS

EXPERTEN SYSTEM MIT SCHNELLEM PATTERN-MATCHING UNTER VERWENDUNG VON  
AQUIVALENZ-KLASSEN

SYSTEME EXPERT AVEC DETERMINATION RAPIDE DE CONCORDANCE AVEC UN MODELE A  
L'AIDE D'UN SYSTEME DE PROJECTION DE CLASSE D'EQUIVALENCE

PATENT ASSIGNEE:

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INVENTOR:

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BARABASH, William, 1 Seneca Court, Acton, MA 01720, (US)

YERAZUNIS, William, S., 193 Stevens Street, Marlboro, MA 01752, (US)

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PATENT (CC, No, Kind, Date): EP 616707 A1 940928 (Basic)

EP 616707 B1 990908

WO 9312482 930624

APPLICATION (CC, No, Date): EP 92906036 911209; WO 91US9205 911209

PRIORITY (CC, No, Date): EP 92906036 911209; WO 91US9205 911209

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: G06F-009/44

CITED REFERENCES (EP B):

PROCEEDINGS. 7TH IEEE CONFERENCE ON ARTIFICIAL INTELLIGENCE vol. 19,  
February 1991, LOS ALAMITOS, CA pages 76 - 80; D.N GORDIN:

'Set-oriented constructs for rule-based systems';

NOTE:

No A-document published by EPO

LEGAL STATUS (Type, Pub Date, Kind, Text):

Oppn None: 000823 B1 No opposition filed: 20000609

Application: 940928 A1 Published application (A1with Search Report  
;A2without Search Report)

Lapse: 010321 B1 Date of lapse of European Patent in a  
contracting state (Country, date): GB  
19991209,

Examination: 940928 A1 Date of filing of request for examination:  
940308

Examination: 960626 A1 Date of despatch of first examination report:  
960508

Change: 981202 A1 International patent classification (change)

Change: 981202 A1 Title of invention (German) (change)

Change: 981202 A1 Title of invention (English) (change)

Change: 981202 A1 Title of invention (French) (change)

Grant: 990908 B1 Granted patent

Change: 991201 B1 Legal representative(s) changed 19991012

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9936	650
CLAIMS B	(German)	9936	580
CLAIMS B	(French)	9936	742
SPEC B	(English)	9936	9890

Total word count - document A 0

Total word count - document B 11862

Total word count - documents A + B 11862

INTERNATIONAL PATENT CLASS: G06F-009/44

...SPECIFICATION is generated based on the significant inter-object  
constraints 4. An equivalence class is a set of objects that, for the  
purposes of a complex **data base query** (such as joins over a non-key  
field) in a **data base** system, or matching in a particular rule in a  
rule based expert system, are indistinguishable and completely  
interchangeable with respect to the **data base** join being **performed**  
or **rule** being **evaluated**, respectively. The equivalence classes 6  
themselves (and not the individual members of that equivalence class) are  
then evaluated to find a set of tuples of...

8/5,K/13 (Item 13 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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00522928

Database retrieval system for responding to natural language queries with  
corresponding tables

Datenbankauffindungssystem zur Beantwortung natursprachlicher Fragen mit  
dazugehörigen Tabellen

Systeme de recouvrement de donnees pour repondre aux interrogations en  
langage naturel avec des tables correspondantes

PATENT ASSIGNEE:

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Inaba, Naohito, c/o Mitsubishi Denki, K.K., Johodenshi Kenkyusho, 1-1,  
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LEGAL REPRESENTATIVE:

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(DE)

PATENT (CC, No, Kind, Date): EP 522591 A2 930113 (Basic)  
EP 522591 A3 931103  
EP 522591 B1 000322

APPLICATION (CC, No, Date): EP 92111820 920710;

PRIORITY (CC, No, Date): JP 91171217 910711

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-017/30

CITED PATENTS (EP A): US 4994967 A; EP 427240 A; WO 8909455 A

CITED PATENTS (EP B): EP 427240 A; WO 89/09455 A; US 4994967 A

CITED REFERENCES (EP A):

PATENT ABSTRACTS OF JAPAN vol. 013, no. 263 (P-886)19 June 1989

PATENT ABSTRACTS OF JAPAN vol. 135, no. 000 (P-979)20 December 1989;

CITED REFERENCES (EP B):

PATENT ABSTRACTS OF JAPAN vol. 013, no. 263 (P-886)19 June 1989 & JP-A-1  
058 019 ( FUJITSU LTD ) 6 March 1989

PATENT ABSTRACTS OF JAPAN vol. 135, no. 000 (P-979)20 December 1989 &  
JP-A-1 243 116 ( HITACHI LTD ) 27 September 1989;

ABSTRACT EP 522591 A2

An information retrieval system is used for retrieving information from  
a database. The information retrieval system includes a parser for  
parsing a natural language input query into constituent phrases as a  
syntax analysis result. The system also includes a virtual table for  
converting phrases of the natural language query to retrieval keys that  
are possessed by the database. The virtual table accounts for particles  
that modify the phrases in the input query. A collating unit is provided  
in the system for preparing a database retrieval formula from the syntax  
analysis result by selecting a virtual table that it is used to convert  
the phrases to the keys possessed by the database. Lastly, the system  
includes a retrieval execution unit for retrieving data from the database  
on the basis of the database retrieval formula.

ABSTRACT WORD COUNT: 135

NOTE:

Figure number on first page: NONE

LEGAL STATUS (Type, Pub Date, Kind, Text):

Oppn None: 010307 B1 No opposition filed: 20001223  
Grant: 20000322 B1 Granted patent  
Application: 930113 A2 Published application (Alwith Search Report  
;A2without Search Report)  
Examination: 930113 A2 Date of filing of request for examination:  
920710  
Search Report: 931103 A3 Separate publication of the European or  
International search report  
Examination: 980715 A2 Date of despatch of first examination report:  
980602

Change: 990609 A2 International patent classification (change)

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200012	323
CLAIMS B	(German)	200012	296
CLAIMS B	(French)	200012	408
SPEC B	(English)	200012	8386
Total word count - document A			0
Total word count - document B			9413
Total word count - documents A + B			9413

INTERNATIONAL PATENT CLASS: G06F-017/30

...SPECIFICATION these phrases are nouns. The dictionary 2 is not referenced for the zyoshi "ha" and "no".

Syntax and semantic analysis is then performed on the **query**. In particular, syntactic analysis is performed to process the syntax or the **query** in order to understand the role each phrase serves in the **query**. Semantic analysis, on the other hand, is performed to understand what is being requested by the **query**.

Subsequently, semantic **analysis** is **performed** to relate the meaning of the **query** to the **database** entries. The semantic analysis relies on the hierarchical table model 6 (see Fig. 3b) to ascertain that "chokoreeto rui" (chocolates and the like) is an...

...that the attribute "chokoreeto rui" in table 18 modifies the attribute "uriage" (sales), which appears in a higher order table 14. Using these results, a **retrieval** formula "**retrieval** condition: (commodity group name = chokoreeto rui), **retrieval** object: uriage" is obtained and is output from the **retrieval** sentence analysis unit 5. Subsequently, **retrieval** from the **database** 9 is performed by the **retrieval** processing unit 8 to obtain the desired data.

Figs. 4a, 4b and 4c show dictionaries used in a second conventional database retrieval system, as disclosed...

8/5,K/30 (Item 17 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00876939 \*\*Image available\*\*

METHOD FOR SEARCH IN AN AUDIO DATABASE

SYSTEMES ET PROCEDES PERMETTANT DE RECONNAITRE DES SIGNAUX SONORES ET MUSICAUX DANS DES SIGNAUX A GRAND BRUIT ET GRANDE DISTORSION

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SMITH Julius O III, 4360 Miller Avenue, Palo Alto, CA 94308, US, US (Residence), US (Nationality), (Designated only for: US)

Legal Representative:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200211123 A2-A3 20020207 (WO 0211123)

Application: WO 2001EP8709 20010726 (PCT/WO EP0108709)

Priority Application: US 2000222023 20000731; US 2001839476 20010420

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR

KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE

SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **G06F-017/30**

International Patent Class: G10H-001/00; G10L-015/02; G10L-015/20

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 15662

#### English Abstract

A method for recognizing an audio sample locates an audio file that most closely matches the audio sample from a database indexing a large set of original recordings. Each indexed audio file is represented in the database index by a set of landmark timepoints and associated fingerprints. Landmarks occur at reproducible locations within the file, while fingerprints represent features of the signal at or near the landmark timepoints. To perform recognition, landmarks and fingerprints are computed for the unknown sample and used to retrieve matching fingerprints from the database. For each file containing matching fingerprints, the landmarks are compared with landmarks of the sample at which the same fingerprints were computed. If a large number of corresponding landmarks are linearly related, i.e., if equivalent fingerprints of the sample and retrieved file have the same time evolution, then the file is identified with the sample. The method can be used for any type of sound or music, and is particularly effective for audio signals subject to linear and nonlinear distortion such as background noise, compression artifacts, or transmission dropouts. The sample can be identified in a time proportional to the logarithm of the number of entries in the database; given sufficient computational power, recognition can be performed in nearly real time as the sound is being sampled.

#### French Abstract

La presente invention concerne un procede permettant de reconnaitre un echantillon audio, par localisation d'un fichier audio qui correspond le plus etroitement a l'echantillon audio, a partir d'une base de donnees indexant un vaste ensemble d'enregistrements originaux. Chaque fichier audio indexe est represente dans l'index de la base de donnees par un ensemble de moments reperes et d'empreintes associees. Des reperes apparaissent a des emplacements reproductibles dans le fichier, alors que des empreintes representent des caracteristiques du signal aux moments reperes ou a proximite des moments reperes. Afin de realiser une reconnaissance, des reperes et des empreintes sont calcules pour l'echantillon inconnu et utilises pour recuperer des empreintes correspondantes a partir de la base de donnees. Pour chaque fichier contenant des empreintes correspondantes, les reperes sont compares aux reperes de l'echantillon pour lequel les memes empreintes ont ete calculees. Si un grand nombre de reperes correspondants sont lineairement associes, c'est-a-dire si des empreintes equivalentes de l'echantillon et un fichier recupere presentent la meme evolution dans le temps, le fichier est alors identifie a l'echantillon. Ce procede peut etre mis en oeuvre pour tout type de son ou de musique et est particulierement efficace pour des signaux audio soumis a une distorsion lineaire et non lineaire, telle qu'un bruit de fond, des artefacts de compression ou des interruptions de transmission de courte duree. L'echantillon peut etre

identifie dans periode proportionnelle au logarithme du nombre d'entrees dans la base de donnees. Avec une puissance de calcul suffisante, l'operation de reconnaissance peut etre realisee presque en temps reel, des que le son est echantillonne.

Legal Status (Type, Date, Text)

Publication 20020207 A2 Without international search report and to be republished upon receipt of that report.

Examination 20020321 Request for preliminary examination prior to end of 19th month from priority date

Search Rpt 20020530 Late publication of international search report

Republication 20020530 A3 With international search report.

Republication 20020530 A3 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

Main International Patent Class: **G06F-017/30**

Fulltext Availability:

Detailed Description

Detailed Description

... As such, current audio retrieval schemes index audio signals by computed perceptual characteristics that represent various qualities or features of the signal.

Content-based audio **retrieval** is typically performed by analyzing a **query** signal to obtain a number of representative characteristics, and then applying a similarity measure to the derived characteristics to locate **database** files that are most similar to the **query** signal.

The similarity of received objects is necessarily a reflection of the perceptual characteristics selected. A number of content-based retrieval methods are available in...

**8/5,K/32 (Item 19 from file: 349)**

DIALOG(R)File 349:PCT FULLTEXT

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00846448 \*\*Image available\*\*

**INTERACTIVE INTELLIGENT SEARCHING WITH EXECUTABLE SUGGESTIONS**

**RECHERCHE INTELLIGENTE INTERACTIVE COMPRENANT DES SUGGESTIONS EXECUTABLES**

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Legal Representative:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200180177 A2-A3 20011025 (WO 0180177)

Application: WO 2001US12510 20010418 (PCT/WO US0112510)

Priority Application: US 2000551533 20000418

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CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR

KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE

SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: G06N-005/04

International Patent Class: **G06F-017/30**

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Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 13142

English Abstract

A method, system, and computer program product for interactive searching with executable suggestions are provided. The present invention provides a search engine and data management technology that can understand what users are looking for, understand the data in a database, and present immediately useful suggestions for finding the right information. Executable suggestions are presented that enable a user to further narrow or broaden a search intelligently and adaptively in real-time. Each executable suggestion describes a search and corresponding search criteria and provides information on the actual search results a user will obtain according to this search criteria. In one embodiment of the present invention, a system has a suggestion engine and one or more suggestion spaces.

French Abstract

L'invention concerne un procede, un systeme et un progiciel de recherche intelligente interactive comprenant des suggestions executables. D'une maniere specifique, l'invention concerne un moteur de recherche et une technologie de gestion des donnees capables de comprendre ce que recherchent les utilisateurs et les donnees dans une base de donnees et de presenter immediatement des suggestions utiles pour trouver la bonne information. Des suggestions executables sont presentees afin de permettre a un utilisateur de resserrer ou d'elargir une recherche en temps reel et de maniere intelligente et adaptative. Chaque suggestion executable decrit une recherche et les criteres de recherche correspondants et fournit les informations concernant les resultats reels de la recherche qu'un utilisateur va obtenir d'apres ces criteres de recherche. Dans un mode de realisation, un systeme comporte un moteur de suggestions et un ou plusieurs espaces de suggestions.

Legal Status (Type, Date, Text)

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Search Rpt 20030130 Late publication of international search report

Republication 20030130 A3 With international search report.

International Patent Class: G06F-017/30

Fulltext Availability:

Detailed Description

Detailed Description

... multi-dimensional indexes) into the data that can be used to access the data in powerful ways.

With respect to Iznknowledge of the end-user **query** , by analyzing the colouponent parts of **queries** developed by end-users to **search** a local or knovAi **database** , a system, according to the present invention, can gain Iznknowledge of what users are- looking for. Furthermore, by storing and analyzing end-user **queries** over time, a system can categorize **queries** and leani about such things as the most used **query** , least used **query** , most **successful query** , least **successful query** , and more. The collection and **analysis** of meta-data about data in a **database** along with the knowledge of What end-users are **searching** for, and the knowledge of historical **query** analysis can then be used to develop real-time dynaraic matches and executable suggestions that will helpi ensure the best possible matches are being found...

8/5,K/34 (Item 21 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00833750      \*\*Image available\*\*

**SYSTEM AND METHOD FOR COMPUTER SEARCHING**

**SYSTEME ET PROCEDE POUR EFFECTUER DES RECHERCHES SUR ORDINATEUR**

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Legal Representative:

COLB Sanford T (et al) (agent), Sanford T. Colb & Co., P.O. Box 2273, 76122 Rehovot, IL,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200167297 A1 20010913 (WO 0167297)

Application: WO 2001IL214 20010307 (PCT/WO IL0100214)

Priority Application: US 2000187415 20000307

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CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR

KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE

SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **G06F-017/30**

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 14024

**English Abstract**

A method for computer searching, including receiving an initial data set from a data set source (1), prioritizing items according to user's preferences (2), deselecting data items having low priority (3) and displaying results (4).

**French Abstract**

L'invention concerne un procede pour effectuer des recherches sur ordinateur. Ce procede consiste a recevoir un groupe de donnees initiales a partir d'une source (1) de groupes de donnees; a classer par priorite des elements desdites donnees en fonction des preferences (2) de l'utilisateur, a supprimer de la selection les elements de donnees ayant une priorite basse (3) et a afficher les resultats (4).

Legal Status (Type, Date, Text)

Publication 20010913 A1 With international search report.

Publication 20010913 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

Main International Patent Class: **G06F-017/30**

Fulltext Availability:

Detailed Description

**Detailed Description**

... the items of the input data set is found. In a preferred embodiment, where the data set is a set of results provided by a **search engine** in response to a **search** request, the **analysis** is **performed** by treating the descriptions of the found items provided by the **search engine** (e.g. the text accompanying each URL in a typical Internet **search engine** results list) as keywords or descriptors of the found objects,

and analyzing them statistically to identify keywords or descriptors common to a relatively large sets...

8/5,K/36 (Item 23 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00831825 \*\*Image available\*\*

**SEARCH ENGINE FOR SPATIAL DATA INDEXING**  
**MOTEUR DE RECHERCHE SUR L'INTERNET**

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200165410 A2-A3 20010907 (WO 0165410)

Application: WO 2001US5165 20010216 (PCT/WO US0105165)

Priority Application: US 2000185322 20000228; US 2000226358 20000818; US  
2001261095 20010110

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ

DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG

SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: G06F-017/30

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 8610

**English Abstract**

The invention disclosed is a spatial indexing intelligent agent that indexes information against a database of spatial language which is used in combination with a modified search engine that conducts searches using spatially relevant criteria and spatial analysis algorithms.

Alpha-numeric values from a mathematical system are used for identifying spatial locations, and can be arbitrary, geocentric, virtual, and galactic.

**French Abstract**

L'invention concerne un agent intelligent d'indexation spatiale qui effectue l'indexation des informations par rapport a une base de donnees d'un langage spatial qui s'utilise en combinaison avec un moteur de recherche modifie qui effectue des recherches en utilisant des criteres pertinents du point de vue spatial et des algorithmes d'analyse spatiale. Des valeurs alphanumeriques provenant d'un systeme mathematique sont utilisees pour identifier des emplacements spatiaux; elles peuvent etre arbitraires, geocentriques, virtuelles et galactiques.

Legal Status (Type, Date, Text)

Publication 20010907 A2 Without international search report and to be  
republished upon receipt of that report.

Examination 20011220 Request for preliminary examination prior to end of

19th month from priority date  
Search Rpt 20020314 Late publication of international search report  
Republication 20020314 A3 With international search report.

Main International Patent Class: **G06F-017/30**

Fulltext Availability:

Detailed Description

Detailed Description

... each page. In other words, if many Web pages are linking to a page X, then page X is considered a high-quality page.

The **search engine** checks the word index and correlates it with web site data found in a **database**. The **database** of web sites will contain basic information gleaned from the web site by a web-indexing robot. The robot will pull descriptions and keywords from...on the page in an attempt to capture better information about the sites checked by the robot. This information will fuel the text and link **analysis performed** by the **search engine**.

**Search engines** use the filtering results **performed** by the web indexing robot to enhance their **search** capabilities and to perform on-demand filtering based on client input at the time of the **search**.

Part IV: Spatial Search Engine (SSE)

An Internet search engine searches an index of words collected by web indexing robots. A SSE searches the spatial...

**8/5,K/37 (Item 24 from file: 349)**  
DIALOG(R)File 349:PCT FULLTEXT  
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00809290 \*\*Image available\*\*

**SEARCH QUERY REFINEMENT USING RELATED SEARCH PHRASES**  
**AFFINAGE DE DEMANDES DE RECHERCHE A L'AIDE DE GROUPES DE MOTS DE RECHERCHE APPARENTES**

Patent Applicant/Assignee:

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Patent and Priority Information (Country, Number, Date):

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CZ (utility model) DE DE (utility model) DK DK (utility model) DM DZ EE  
EE (utility model) ES FI FI (utility model) GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ  
PL PT RO RU SD SE SG SI SK SK (utility model) SL TJ TM TR TT TZ UA UG UZ  
VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

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Publication Language: English

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Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 9705

English Abstract

A **search engine** system uses information about historical **query** submissions to a **search engine** to suggest previously-submitted, related **search** phrases to users (110). The related **search** phrases (139) are preferably suggested based on a most recent set of **query** submission data, and thus strongly reflect the current **searching** patterns or interests of users. The system is preferably implemented within a **search engine** used to locate items that are available for electronic purchase (133), but may be implemented within other types of **search engines**. In one embodiment, the related **search** phrases are scored and selected for display based at least in-part on an **evaluation** of the "usefulness" of each **search** phrase, as reflected by actions **performed** by prior users while viewing the corresponding **search** results.

French Abstract

Système de moteur de recherche qui utilise des informations relatives à l'historique des demandes de recherche adressées à un moteur de recherche pour suggérer aux utilisateurs des groupes de mots de recherche apparentes précédemment soumis. Les groupes de mots de recherche apparentes sont de préférence suggérés sur la base de la série la plus récente des données de demandes soumises (par ex. les demandes soumises pendant les deux dernières semaines), et reflètent donc étroitement les tendances et les intérêts des utilisateurs en matière de recherche au moment concerné. Ledit système est de préférence mis en œuvre dans un moteur de recherche utilisé pour localiser des articles disponibles par achat électronique, mais peut être mis en œuvre dans d'autres types de moteurs de recherche. Dans un mode de réalisation, les groupes de mots de recherche apparentes sont dotés d'un score et sélectionnés en vue de leur affichage, au moins en partie sur la base d'une évaluation de l'«utilité» de chacun de ces groupes de mots, telle qu'elle est reflétée par les actions qu'ont engagées les utilisateurs précédents lors du visionnement des résultats de recherche correspondants.

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Main International Patent Class: G06F-017/30

English Abstract

A **search engine** system uses information about historical **query** submissions to a **search engine** to suggest previously-submitted, related **search** phrases to users (110). The related **search** phrases (139) are preferably suggested based on a most recent set of **query** submission data, and thus strongly reflect the current **searching** patterns or interests of users. The system is preferably implemented within a **search engine** used to locate items that are available for electronic purchase (133), but may be implemented within other types of **search engines**. In one embodiment, the related **search** phrases are scored and selected for display based at least in-part on an **evaluation** of the "usefulness" of each **search** phrase, as reflected by actions **performed** by prior users while viewing the corresponding **search** results.

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DIALOG(R)File 349:PCT FULLTEXT  
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00799844 \*\*Image available\*\*  
SYSTEM AND METHOD FOR RETRIEVING INFORMATION WITH NATURAL LANGUAGE QUERIES  
SYSTEME ET PROCEDE POUR RETROUVER DES INFORMATIONS PAR DES INTERROGATIONS  
EN LANGAGE NATUREL

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Patent and Priority Information (Country, Number, Date):

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Priority Application: DE 19952769 19991102

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DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG

SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

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Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 9803

English Abstract

A search machine finds and ranks documents in a database based on a set of rules that match characteristics of the database with a natural language query. The system includes a lexicon component which may parse the query and the database into words and word stems. Thereafter, the query and documents may be vectorized such that the elements of the vector correspond to a given word stem, and the value of the element in the vector corresponds to the number of occurrences of the word in the document. The vectorized query is then compared and evaluated against each of the vectorized documents of the database to obtain a ranked list of documents from the database. The user may evaluate the documents found and provide information back to the search machine in order to adjust, for example, the ranking produced by the search machine. In this way, the search machine can fine tune its search and ranking technique to meet the user's specific criteria.

French Abstract

Une machine de recherche a pour but de rechercher et de classer des documents dans une base de donnees conformement a un ensemble de regles adaptant les caracteristiques de la base de donnees a des interrogations en langage naturel. Le systeme comprend un composant lexique qui peut analyser la question et la base de donnees en mots et radicaux. Apres quoi, la question et les documents peuvent etre vectorises de telle facon que les elements du vecteur correspondent a une racine de mots determinee, et que la valeur de l'element dans le vecteur corresponde au nombre de fois que le mot se presente dans le document. La question vectorisee est ensuite comparee et evaluee par rapport a chacun des documents vectorises de la base de donnees, de maniere a obtenir une liste classee de documents provenant de la base de donnees. L'utilisateur peut evaluer les documents trouves et fournir des informations en retour a la machine de recherche en vue d'ajuster, par exemple, le classement fourni par la machine de recherche. De cette maniere, la machine de recherche peut mettre au point de facon plus precise sa recherche et son classement en vue de repondre aux criteres specifiques de l'utilisateur.

Legal Status (Type, Date, Text)

Publication 20010510 A2 Without international search report and to be  
republished upon receipt of that report.

Main International Patent Class: **G06F-017/30**

Fulltext Availability:

## Detailed Description

### Detailed Description

... material resources, catalogs for purchasing or Internet shopping, or other forms of information.

While discussion of the preferred embodiment may refer to documents of the **database 110**, the **search machine 100** may operate on **databases** that are not strictly in the form of documents. More generally, the term document does not connote any particular structure, but is used to generically refer to any partition, subdivision, component, section, or part of the **database**, however it may be divided or demarcated. Additionally, the **database 110**, and documents 111 that may be contained in the **database 110**, are not required

- 7  
to have any special structure or organization. The **search machine 100**, however, could exploit a special structure or organization of the **database 110** by integrating, for example, appropriate structure **analyzers** to improve the **search machine's** accuracy and **efficiency**.

Additionally, the **search machine** according to the present invention is not restricted to a specific environment, such as **database retrieval**, but may also be used in various contexts, such as context-sensitive online help in complex working and information environments, **retrieval** of relevant information in tutor and advisory systems, decision support for the organization of information **databases**, and information agents which **search** to build up, organize and maintain new information **databases**.

The document database 110 should contain the documents 111 that are to be evaluated for content responsive to the query document 10. The database...

8/5,K/41 (Item 28 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00797933 \*\*Image available\*\*

#### METHOD AND APPARATUS FOR PROCESSING QUERIES

#### PROCEDE ET APPAREIL DE TRAITEMENT DE DEMANDES

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Patent and Priority Information (Country, Number, Date):

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DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR

LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ

TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

• Main International Patent Class: G06F-017/30  
Publication Language: English  
Filing Language: English  
Fulltext Availability:  
Detailed Description  
Claims  
Fulltext Word Count: 9773

#### English Abstract

Apparatus for processing queries, which queries may be expressed in natural language, the apparatus comprising: (i) decoding means for decoding a query into one or more semantically meaningful query elements; (ii) accessing means for accessing data storage, which data storage includes at least one annotation element and one or more corresponding data entries; (iii) identifying means for identifying annotation elements in accordance with the semantically meaningful query elements; and (iv) retrieval means for retrieving at least one data entry corresponding to each identified annotation element.

#### French Abstract

La presente invention concerne un appareil de traitement de demandes, ces demandes pouvant etre exprimees en langage naturel. Cet appareil comprend: (i) un organe de decodage destine a decoder une demande en un ou plusieurs elements de demande significatif du point de vue de la semantique, (ii) un organe d'accès destine a accéder a un stock de donnees, ce stock incluant au moins un element d'annotation et une ou plusieurs entrees de donnees correspondantes, (iii) un organe d'identification destine a identifier des elements d'annotation en conformite avec les elements de demande significatifs du point de vue de la semantique, et (iv) un organe de localisation destine a localiser au moins une entree de donnees correspondante a chaque element d'annotation identifie.

#### Legal Status (Type, Date, Text)

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Examination 20010816 Request for preliminary examination prior to end of 19th month from priority date

#### Main International Patent Class: G06F-017/30

Fulltext Availability:  
Detailed Description

#### Detailed Description

... be illustrated, by way of example only, with reference to the accompanying drawings, in which.

Figure 1 is a schematic diagram showing apparatus for inputting **queries** to, and receiving information from, a **database** according to the present invention, Figure 2 is a block diagram of the apparatus of Figure 1, showing the arrangement of the data store;  
Figure...

...of the apparatus of Figure 1, showing the components comprising the analysing means according to the first embodiment;  
Figure 4 is a flow diagram of **query** processing **performed** by the **analysing** means of Figure 3;  
Figure 5 is a flow diagram of further **query** processing **performed** by the **analysing** means of Figure 3;  
5 Figure 6 is a flow diagram of processing a new input according to the second embodiment;  
Figure 7 is a...

...Figure 8 is a block diagram of the apparatus of Figure 1, showing the components comprising the analysing means according to the second

embodiment for **query**  
analysis;  
Figure 9a is an illustration of an input display for entering annotations  
according to  
the second embodiment;  
5 Figure 9b is a block diagram...

...for an alternative configuration of the client/server arrangement  
shown in Figure 1  
Overview  
Referring to Figure 1, an embodiment of the apparatus for inputting  
**queries** to, and receiving information from, a data source is shown  
divided into 5 functional parts.

SERVER  
STORAGE  
DATA ANALYSIS  
USER INTERFACE

\* RETRIEVAL

The SERVER computer...106 on the server computer 105, or may be a  
separate data store located either local to or remote from the server  
105. The functions **performed** by the **query analyser** 302, the pattern  
matcher 304 and the generator 303 may be written in  
IServer data held on the client  
the Perl programming language. However, it is understood that the use of  
Perl is inessential to the invention. The input mechanism allows authors,  
who are populating the **database** with new entries, to enter the  
corresponding annotation without having to conform to any programming  
standards. Clearly this is an 5 advantage as entries may...

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DIALOG(R)File 349:PCT FULLTEXT  
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00577722

**METHOD AND APPARATUS FOR PERFORMING SUPPLEMENTAL SEARCHES OVER A NETWORK**  
**PROCEDE ET APPAREIL POUR EFFECTUER DES RECHERCHES SUPPLEMENTAIRES SUR UN**  
**RESEAU**

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ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT  
LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ  
MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ  
CF CG CI CM GA GN GW ML MR NE SN TD TG

Main International Patent Class: **G06F-017/27**

Publication Language: English

Fulltext Availability:

Detailed Description  
Claims

Fulltext Word Count: 10582

English Abstract

A method and apparatus are disclosed for cooperating with a first  
software program to perform a supplemental search over the Internet or



another public network. A supplemental search is performed in the background to obtain desired information, while the user continues the primary task of creating, for example, a document. The user does not have to divert his or her attention from the primary task of creating the document to manually initiate a search. An illustrative word processing application program spawns a background thread in a multithreaded environment to perform the supplemental search using a browser, while the word processing application program maintains continuous control until the search results are obtained and viewed by the user. A supplemental search can be performed on a given topic (i) when requested by a user, or (ii) automatically, if a predefined condition, such as the occurrence of an apparently improper data element that fails to satisfy the requirements of a spelling or grammar database, is detected in a document of an application program. Thus, the invention can be configured to perform Internet-based spelling or grammar checking and automatically detect the adoption of new words or phrases and changes in acceptable grammar usage. In addition, the word processing application program automatically determines if a document being created corresponds to one or more predefined categories. If a document being created corresponds to a predefined category, the document can optionally be provided to an expert associated with said identified category for review.

#### French Abstract

L'invention porte sur un procede et un appareil permettant de collaborer avec un premier programme logiciel de facon a effectuer une recherche supplementaire sur Internet ou un autre reseau public. La recherche supplementaire est effectuee dans la zone de fond de facon a obtenir les informations desirees tandis que l'utilisateur continue d'effectuer la tache primaire de creation telle qu'un document. L'utilisateur n'est pas detourne de sa tache primaire de creation de document lorsqu'il declenche manuellement une recherche. Un programme d'application de traitement de mots illustre genere dynamiquement un chemin de fond dans un environnement a plusieurs chemins pour effectuer la recherche supplementaire a l'aide d'un navigateur, tandis que le programme d'application de traitement de mots maintient une commande continue jusqu'a l'obtention des resultats de recherche et leur visualisation. Une recherche supplementaire peut etre effectuee sur un sujet donne (i) demande par un utilisateur, ou (ii) automatiquement, si un etat predefini, tel que l'occurrence d'un element de donnee apparemment impropre qui ne peut satisfaire aux exigences d'une base de donnees d'orthographe ou de grammaire, est detecte dans un document d'un programme d'application. Ce systeme peut donc etre configure de facon a effectuer une verification d'orthographe ou de grammaire a partir d'Internet et a detecter automatiquement l'adoption de nouveaux mots ou phrases et les corriger selon les usages grammaticaux acceptables. Ce programme d'application de traitement de mots peut egalement determiner automatiquement si un document cree correspond a une ou plusieurs categories predefinies. Si un document cree correspond a une categorie predefinie, le document peut eventuellement etre envoye a un expert associe a la categorie identifiee afin d'etre revise.

Main International Patent Class: G06F-017/27

Fulltext Availability:

Detailed Description

#### Detailed Description

... have to divert his or her attention from the primary task of creating the document to manually initiate a search.

In addition, a supplemental **search** can be performed automatically if a predefined condition is detected in a document of an application program. For example, a supplemental **search** can be **performed** to **evaluate** the usage of an apparently improper data element that fails to satisfy the requirements of a spelling or grammar **database** associated with the word processing application program. A supplemental **search** of an apparently improper data element can be launched automatically if the apparently improper data element appears more than a threshold number of times in a document. The supplemental usage **search** is launched in the background,

transparent to the user, and the user continues working in the word processing application program until the **search** results are received. Thus, the present invention can be configured to perform Internet-based spelling or grammar checking.

Once the search results are received, the...

8/5,K/53 (Item 40 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00565068 \*\*Image available\*\*

**A DENSITY-BASED INDEXING METHOD FOR EFFICIENT EXECUTION OF HIGH-DIMENSIONAL NEAREST-NEIGHBOR QUERIES ON LARGE DATABASES**

**PROCEDE D'INDEXATION BASE SUR LA DENSITE PERMETTANT DE TRAITER EFFICACEMENT DES DEMANDES DE GRANDES DIMENSIONS PAR RECHERCHE DU VOISINAGE LE PLUS PROCHE DANS DE GRANDES BASES DE DONNEES**

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MICROSOFT CORPORATION,

Inventor(s):

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BENNETT Kristin P,  
GEIGER Dan,

Patent and Priority Information (Country, Number, Date):

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Detailed Description

Claims

Fulltext Word Count: 9455

English Abstract

Method and apparatus for efficiently performing nearest neighbor **queries** on a **database** of records wherein each record has a large number of attributes by automatically extracting a multidimensional index from the data. The method is based on first obtaining a statistical model of the content of the data in the form of a probability density function. This density is then used to decide how data should be reorganized on disk for efficient nearest neighbor **queries**. At **query** time, the model decides the order in which data should be scanned. It also provides the means for evaluating the probability of correctness of the answer found so far in the partial scan of data determined by the model. In this invention a clustering process is performed on the **database** to produce multiple data clusters. Each cluster is characterized by a cluster model. The set of clusters represent a probability density function in the form of a mixture model. A new **database** of records is built having an augmented record format that contains the original record attributes and an additional record attribute containing a cluster number for each record based on the clustering step. The cluster model uses a probability density function for each cluster so that the process of augmenting the attributes of each record is accomplished by evaluating each record's probability with respect to each cluster. Once the augmented records are used to build a **database** the augmented attribute is used as an index into the **database** so that nearest neighbor **query analysis** can be very **efficiently** conducted using an indexed look up process. As the **database** is **queried**, the probability density function is used to determine the order clusters or **database** pages are scanned. The probability density function is also used to determine when scanning can stop because the nearest neighbor has been found with high probability.

French Abstract

L'invention concerne un procede et un appareil, permettant de traiter efficacement des demandes par recherche du voisinage le plus proche dans

une base de donnees d'enregistrements, chaque enregistrement possedant un grand nombre d'attributs obtenus par extraction automatique d'un index multidimensionnel a partir des donnees. Ce procede consiste d'abord a obtenir un modele statistique du contenu des donnees, sous la forme d'une fonction de densite de probabilite. On utilise ensuite cette densite pour definir la maniere de reorganiser les donnees sur un disque, pour traiter efficacement des demandes de recherche du voisinage le plus proche. Au moment de la demande, le modele decide l'ordre dans lequel les donnees doivent etre balayees. Il fournit egalement les moyens d'evaluer la probabilite d'exactitude de la reponse trouvee dans le balayage partiel des donnees determinees par le modele. Dans cette invention, un procede d'agregation est execute dans la base de donnees, afin de produire plusieurs grappes de donnees. Chaque grappe est caracterisee par un modele de grappe. L'ensemble des grappes represente une fonction de densite de probabilite sous la forme d'un modele de melange. Une nouvelle base de donnees est construite, les enregistrements presentant un format plus grand qui contient les attributs d'enregistrement originaux, et des attributs d'enregistrement supplementaires contenant un certain nombre de grappes pour chaque enregistrement sur la base de l'etape d'agregation. Le modele de grappe utilise une fonction de densite de probabilite pour chaque grappe, de sorte que le processus d'augmentation des attributs de chaque enregistrement est realise par evaluation d'une probabilite de chaque enregistrement par rapport a chaque grappe. Une fois qu'on a utilise les enregistrements augmentes pour construire la base de donnees, les attributs augmentes sont utilises comme index dans ladite base de donnees, de sorte que l'analyse d'une demande de voisinage le plus proche peut etre traitee tres efficacement au moyen d'un procede de recherche d'index. Lorsque la base de donnees est demandee, la fonction de densite de probabilite est utilisee pour determiner l'ordre dans lequel les grappes ou les pages de base de donnees sont balayees. La fonction de densite de probabilite est egalement utilisee pour determiner le moment ou le balayage doit s'arreter, du fait que le voisin le plus proche a ete trouve avec une probabilite elevee.

Main International Patent Class: **G06F-017/30**

Fulltext Availability:

Detailed Description

#### English Abstract

Method and apparatus for efficiently performing nearest neighbor **queries** on a **database** of records wherein each record has a large number of attributes by automatically extracting a multidimensional index from the data. The method is based on...

...the form of a probability density function. This density is then used to decide how data should be reorganized on disk for efficient nearest neighbor **queries**. At **query** time, the model decides the order in which data should be scanned. It also provides the means for evaluating the probability of correctness of the answer found so far in the partial scan of data determined by the model. In this invention a clustering process is performed on the **database** to produce multiple data clusters. Each cluster is characterized by a cluster model. The set of clusters represent a probability density function in the form of a mixture model. A new **database** of records is built having an augmented record format that contains the original record attributes and an additional record attribute containing a cluster number for...

...of each record is accomplished by evaluating each record's probability with respect to each cluster. Once the augmented records are used to build a **database** the augmented attribute is used as an index into the **database** so that nearest neighbor **query analysis** can be very **efficiently** conducted using an indexed look up process. As the **database** is **queried**, the probability density function is used to determine the order clusters or **database** pages are scanned. The probability density function is also used to determine when scanning can stop because the nearest neighbor has been found with high...

Detailed Description

.... invention. Although both the clustering component C and, the query component QC are depicted in Figure 213, it is appreciated that the clustering can be **performed** independently of the **query**. The **query analysis** component QC finds with high probability a nearest neighbor (NN) of a **query** point Q presented as an input to the **query** analysis component. The nearest neighbor of Q is then found in one of two ways. A decision step 15 determines whether a complete scan of the **database** is more efficient than a probabilistic **search** for the nearest neighbor (NN). If the complete scan is more efficient, the scan is performed 16 and the nearest neighbor identified. If not, a region is chosen 17 based on the **query** point and that region is scanned 18 to determine the nearest neighbor within the region. Once the nearest neighbor (NN) in the first identified region...

...check for a nearest neighbor or neighbors. Eventually the nearest neighbor or neighbors are found with acceptable certainty and the results are output from the **query** analysis component QC.

To illustrate the process of finding a nearest neighbor outlined in Figure 2B consider the data depicted in Figures 3A and 3B...

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00474266 \*\*Image available\*\*

APPARATUS AND METHODS FOR AN INFORMATION RETRIEVAL SYSTEM THAT EMPLOYS  
NATURAL LANGUAGE PROCESSING OF SEARCH RESULTS TO IMPROVE OVERALL  
PRECISION

APPAREIL ET PROCÉDES POUR SYSTÈME D'EXTRACTION D'INFORMATION UTILISANT LE  
TRAITEMENT EN LANGAGE NATUREL DES RÉSULTATS DE RECHERCHE POUR AMÉLIORER  
LA PRÉCISION GLOBALE

Patent Applicant/Assignee:

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DOLAN William B,

VANDERWENDE Lucy H,

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Application: WO 98US9711 19980513 (PCT/WO US9809711)

Priority Application: US 97898652 19970722

Designated States: CN JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT  
SE

Main International Patent Class: G06F-017/30

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 20517

English Abstract

Apparatus and accompanying methods for an information retrieval system that utilizes natural language processing to process results retrieved by, for example, an information retrieval engine such as a conventional statistical-based search engine, in order to improve overall precision. Specifically, such a search ultimately yields a set of retrieved documents. Each such document is then subjected to natural language processing to produce a set of logical forms. Each such logical form encodes, in a word-relation-word manner, semantic relationships, particularly argument and adjunct structure, between words in a phrase. A user-supplied query is analyzed in the same manner to yield a set of corresponding logical forms therefor. Documents are ranked as a predefined function of the logical forms from the documents and the query. Specifically, the set of logical forms for the query is then compared against a set of logical forms for each of the retrieved

documents in order to ascertain a match between any such logical forms in both sets. Each document that has at least one matching logical forms is heuristically scored, with each different relation for a matching logical forms being assigned a different corresponding predefined weight. The score of each such document is, e.g., a predefined function of the weights of its uniquely matching logical forms. Finally, the retained documents are ranked in order of descending score and then presented to a user in that order.

#### French Abstract

Appareils et procedes associes, pour un systeme de recherche d'information utilisant le traitement en langage naturel pour traiter les resultats extraits, par exemple, par un moteur d'extraction d'information comme un moteur de recherche a base statistique classique, afin d'ameliorer la precision globale. Ladite recherche permet notamment de produire en final un ensemble de documents extraits. Chaque document est ensuite soumis a un traitement en langue naturelle de sorte qu'un ensemble de formes logiques soit produit. Chaque forme logique code, en mode mot-relation-mot, les relations semantiques, notamment la structure d'argument et d'adjonction, entre les mots d'une phrase. Une demande formulee par l'utilisateur est analysee de la meme maniere de sorte qu'un ensemble de formes logiques correspondantes soit produit. Les documents sont classes en fonction, de maniere predeterminee, des formes logiques provenant des documents et de la demande. Specifiquement, l'ensemble de formes logiques pour la demande est ensuite compare a un ensemble de formes logiques pour chacun des documents extraits, de maniere qu'un appariement soit etabli entre chaque forme logique des deux ensembles. Chaque document qui presente au moins une forme logique appariee est evalue de maniere heuristique, un poids predefini different et correspondant different etant attribue a chaque relation differente pour une forme logique appariee. L'evaluation de chaque document est fonction, par exemple, de maniere predeterminee, des poids de ses formes logiques appariees uniques. Les documents retenus sont ensuite classes dans l'ordre decroissant puis presentes a un utilisateur dans cet ordre.

Main International Patent Class: G06F-017/30

Fulltext Availability:

Detailed Description

#### Detailed Description

... next group of document records having the next highest rankings, and so forth until all the retrieved document records have been so reviewed.

Traditionally, the **performance of search engines** has been **assessed** in terms of recall and precision. Recall measures, as a percentage of all relevant documents in a dataset, the number of such documents actually **retrieved** in response to a given **query**. Precision, on the other hand, measures, as a percentage of all documents **retrieved**, the number of those documents that are actually relevant to the **query**. We believe that in the context of a web **search engine**, recall is not an important metric of performance, inasmuch as the sheer number of documents ultimately **retrieved** is unimportant. In fact, for some **queries**, this number could be inordinately large.

Hence, we believe that not all relevant documents indexed by the engine need to be retrieved in order to...

8/5,K/61 (Item 48 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00441600 \*\*Image available\*\*

A SYSTEM AND METHOD FOR DATABASE QUERY OPTIMIZATION

**SYSTEME ET PROCEDE PERMETTANT D'OPTIMISER L'INTERROGATION D'UNE BASE DE  
DONNEES**

Patent Applicant/Assignee:

TANDEM COMPUTERS INC,

Inventor(s):

CELIS Pedro,

VAISHNAV Jay,

ZELLER Hansjorg,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9832064 A2 19980723

Application: WO 97US23087 19971215 (PCT/WO US9723087)

Priority Application: US 96773695 19961227

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Main International Patent Class: **G06F-017/30**

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 18208

**English Abstract**

A system and method for optimizing (402) a database query with improved performance enhancements is herein disclosed. The database query consists of one or more logical expressions (304). Through the repeated application of one or more rules (335), the logical expressions (304) are transformed into physical expressions (306) and in some cases, execution plans that implement the database query. Each expression (311) has associated with it a set of group attributes that specifies its characteristic inputs and outputs and a cost (346) that estimates the computational expense for executing the expression. The group attributes are used to categorize similar expressions into groups that are stored in a search data structure. They are also used to track duplicate expressions. The cost associated with an expression is used to guide the search process to consider those expressions that will produce low cost plans.

**French Abstract**

La presente invention concerne un systeme et un procede permettant d'optimiser l'interrogation d'une base de donnees au moyen d'elements qui en ameliorent le rendement. L'interrogation d'une base de donnees est composee d'une ou plusieurs expressions logiques. En appliquant une ou plusieurs regles de facon repetee, on transforme les expressions logiques en expressions physiques et, dans certains cas, en plans d'execution qui permettent d'executer l'interrogation de la base de donnees. A chaque expression est associe un ensemble d'attributs de groupe qui specifie les entrees et sorties caracteristiques de l'expression, ainsi qu'un cout qui represente l'estimation de la depense computationnelle entrainee par l'execution de l'expression. Les attributs de groupe sont utilises pour classer les expressions similaires en groupes, lesquels sont stockes dans une structure de recherche de donnees. Ils sont egalement utilises pour rechercher les expressions doubles. Le cout associe a une expression est utilise pour guider le processus de recherche afin qu'il prenne en consideration les expressions qui produiront des plans a moindre cout. Le cout est evalue en fonction d'un critere en six points, chaque point etant pondere de maniere qu'il tient compte du contexte de l'expression et de l'environnement de calcul propre a l'application. L'optimiseur d'interrogation est base sur des regles, y compris des regles de transformation et d'implementation, qui sont utilisees pour realiser les transformations sur les expressions logiques dans un sous-probleme afin de produire un plan. Un procede de guidage "application unique" (OnceGuidance) est utilise pour choisir, dans certains cas, un groupe de regles qui empechent que soit a nouveau generee une expression qui existe deja.

Main International Patent Class: **G06F-017/30**

Fulltext Availability:

Detailed Description

Detailed Description

... manner, only those  
equivalent expressions that will produce more promising solutions in the  
- 38  
subsequent optimization are generated rather than all possible  
transformations.

The Memo **search** structure tracks each solution or plan considered by  
the  
**search engine**, even those that are eliminated from consideration due  
to their excessive cost. However, duplicate expressions can be generated  
during the  
**search** process. A redundancy **check** is **performed** before an  
expression is  
stored in the Memo **search** structure. This check eliminates the  
retention of duplicate expressions in the Memo **search** structure.

#### MULTIPASS OPTIMIZATION

In a preferred embodiment of the present invention, multiple optimization  
passes are performed. During the first optimization pass, only those  
rules that...

8/5,K/62 (Item 49 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00418777 \*\*Image available\*\*

**METHOD AND SYSTEM FOR USING MATERIALIZED VIEWS TO EVALUATE QUERIES  
INVOLVING AGGREGATION**  
**PROCEDE ET SYSTEME UTILISANT DES VUES MATERIALISEES POUR EVALUER DES  
REQUETES FAISANT INTERVENIR UNE LOGIQUE D'AGREGATION**

Patent Applicant/Assignee:

AT & T CORP,

Inventor(s):

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JAGADISH Hosagrahar Visvesvaraya,

LEVY Alon Yitzchak,

SRIVASTAVA Divesh,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9809238 A1 19980305

Application: WO 97US14660 19970819 (PCT/WO US9714660)

Priority Application: US 9624635 19960827; US 97895024 19970716

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Main International Patent Class: **G06F-017/30**

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 10757

#### English Abstract

The present invention is a method and system for using materialized  
views to compute answers to SQL queries with grouping and aggregation. A  
query is evaluated by using a materialized view. The materialized view is  
semantically analyzed to determine whether the materialized view is  
usable in evaluating an input query. The semantic analysis includes  
determining that the materialized view does not project out any columns  
needed to evaluate the input query and determining that the view does not  
discard any tuple that satisfies a condition enforced in the input query.  
If the view is usable, the input query is rewritten to produce an output  
query that is multi-set equivalent to the input query and that specifies  
one or more occurrences of the materialized view as a source of  
information to be returned by the output query. The output query is then  
evaluated. The semantic analysis and rewriting may be iterated, with the  
output query of each iteration being the input query of the next  
iteration. The output query is evaluated after the last iteration.

#### French Abstract

La presente invention concerne un procede et un systeme utilisant des vues materialisees pour calculer par regroupement et agregation les reponses a des requetes SQL. L'evaluation d'une requete se fait en utilisant une vue materialisee. Une analyse semantique de la vue materialisee permet de verifier si la vue materialisee est utilisable pour evaluer une requete d'entree. L'analyse semantique consiste a verifier que la vue materialisee ne deborde pas des colonnes necessaires a l'evaluation des requetes d'entree et a verifier que la vue ne detruit pas de ligne satisfaisant une condition instauree dans la requete d'entree. Si la vue est utilisable, une reecriture de la requete donne une requete de sortie qui soit en equivalence, par plusieurs ensembles, avec la requete d'entree et qui specifie une ou plusieurs occurrences de la vue materialisee comme origine de l'information que la requete de sortie doit renvoyer. La requete de sortie subit alors une evaluation. Les operations d'analyse semantique et de reecriture sont repetables, la sortie de chaque iteration constituant la requete d'entree de l'iteration suivante. Ce n'est qu'apres la derniere iteration que la requete de sortie est soumise a evaluation.

Main International Patent Class: **G06F-017/30**

Fulltext Availability:

Detailed Description

Detailed Description

... views to compute the answers.

There has been previous work on using views to answer queries (e.g., H. Z.

Yang and P. A. Larson, " **Query** transformation for PSJ- **queries** ," In Proc. VLDB, 1987; M. Stonebraker, A. Jhingran, J. Goh, and S. Potamianos, "On rules, procedures, caching and views in **database** systems", In Proc. ACM SIGNIOD, 15 1990; O. G. Tsatalos, M. H. Solomon, and Y. E. Ioannidis, "The GN4AP: A versatile tool for physical data independence", In Proc. VLDB, 1994; C. M. Chen and N. Roussopoulos, "The implementation and **performance evaluation** of the ADMS **query** optimizer: Integrating **query** result caching and matching", In Proc.

EDBT, 1994; S. Chaudhuri, R. Krishnamurthy, S. Potamianos, and K. Shim, "Optimizing queries with materialized views", In. Proc. ICDE...

8/5,K/67 (Item 54 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00334800 \*\*Image available\*\*

**END USER QUERY FACILITY**

**LOGICIEL DE CONSULTATION INDIVIDUELLE**

Patent Applicant/Assignee:

ST COMPUTER SYSTEMS & SERVICES LIMITED,

Inventor(s):

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LIM Liat,

TAY Siew Choon,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9617312 A1 19960606

Application: WO 95IB998 19951113 (PCT/WO IB9500998)

Priority Application: US 94346507 19941129

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HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT

RO RU SD SE SG SI SK TJ TM TT UA UG UZ VN KE LS MW SD SZ UG AT BE CH DE

DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN

TD TG

Main International Patent Class: **G06F-017/30**

Publication Language: English

Fulltext Availability:



Detailed Description

Claims

Fulltext Word Count: 21539

#### English Abstract

An end user query technology is taught which is capable of automatically understanding the database model and guiding the user to scout for the desired information, thereby increasing productivity and ease of information access. The user is freed from the need to understanding the database model, with the end user query facility of this invention quickly guiding the user to acquire the information. This is made possible by the end user query facility of this invention first recapturing the application semantics from the existing database model to provide a set of derived semantics. The derived semantics are then used by the end user query facility to intelligently guide the user to scout for the desired information in the database. In addition, the derived semantics can be easily updated by the end user query facility when the database model is changed.

#### French Abstract

L'invention concerne un logiciel de consultation individuelle permettant de comprendre automatiquement le modele de base de donnees et de guider l'utilisateur dans sa recherche des informations desirees, augmentant ainsi la productivite et la facilite de l'accès aux informations. L'utilisateur est degage de la necessite de comprendre le modele de base de donnees, ce logiciel de consultation individuelle le guidant rapidement pour acquerir les informations. Ce logiciel de consultation individuelle permet tout d'abord de saisir a nouveau la semantique de l'application a partir du modele de base de donnees existant en vue de creer un ensemble semantique derive. Ce dernier est ensuite utilise par le logiciel de consultation individuelle pour guider intelligemment l'utilisateur dans sa recherche des informations desirees dans la base de donnees. En outre, cet ensemble semantique derive peut etre aisement actualise par le logiciel de consultation individuelle lors de la modification du modele de base de donnees.

Main International Patent Class: G06F-017/30

Fulltext Availability:

Detailed Description

#### Detailed Description

... an E-R model of the class.

2

In addition these classes and their E-R models can be easily updated by the end-user **query** facility when the **database** model is changed,

In accordance with the teachings of this invention, it has also been determined that there would be some usefulness in providing an end-user **query** technology that allows a user at a remote site with no on-line access to the **database** to still be able to make a **query**. This is made possible by integrating the end-user **query** facility of this invention with an electronic mail system so that the user at the remote site can send his **query** as a mail message and have the result of his **query** posted to him also as a mail message. In addition, a log of all **query** requests and their processing can be kept and **analyzed** to track usage and **performance** of the end-user **query** facility,

BRIEF DESCRIPTION OF THE DRAWING

Figure 1 is a flow chart depicting one embodiment of an end user **query** facility constructed in the accordance with the teachings of this invention;

Figure 2 is a flow chart depicting one embodiment of semantics extractor 12 of...

...scout 15 of the

embodiment to Figure 1;

Figure 5 is a flow chart depicting one embodiment of a method suitable for use as the **search** knowledge base step of

13/5,K/20 (Item 20 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00777958 \*\*Image available\*\*

**OBJECT BASED IMAGE RETRIEVAL**

**EXTRACTION D'IMAGE EN FONCTION DE L'OBJET**

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Beach, CA 92660, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200111489 A2 20010215 (WO 0111489)

Application: WO 2000US21735 20000809 (PCT/WO US0021735)

Priority Application: US 99370366 19990809

Designated States: AE AG AL AM AT AT (utility model) AU AZ BA BB BG BR BY  
BZ CA CH CN CR CU CZ CZ (utility model) DE DE (utility model) DK DK  
(utility model) DM DZ EE EE (utility model) ES FI FI (utility model) GB  
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KR (utility model) KZ LC LK  
LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK  
SK (utility model) SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: G06F-017/00

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 11614

**English Abstract**

An image comparison, classification and retrieval system compares objects and object clusters, or images. User controlled or automatic filtering to enhance object features may be performed prior to object definition. Calculated parameter set is assigned to defined objects. User controlled or automatic object definition system with multi- or single object layer output. The query image may be substantially continuously displayed during the image filtering and object definition processes. The query object, a cluster of objects or an image may be classified as belonging to one of previously defined classes and according to calculated similarity indices. An object, a cluster of objects or an image can be retrieved from an image database based on a query image calculated similarity indices.

**French Abstract**

L'invention concerne un systeme de comparaison, de classification et d'extraction d'images, qui consiste a comparer des objets et des blocs d'objets, ou des images. Un filtrage automatique ou regle par l'utilisateur pour renforcer des caracteristiques d'objet peut etre effectuee avant de definir l'objet. On attribue aux objets definis un ensemble de parametres calcule. L'invention concerne en outre un systeme, automatique ou regle par l'utilisateur, de definition de l'objet presentant une sortie de couche d'objet simple ou multiple. On peut afficher sensiblement et en continu l'image requete pendant les processus de filtrage d'image et de definition d'objet. L'objet requete, un groupe d'objets ou une image peuvent etre classes comme appartenant a l'une des classes precedemment definies et en fonction d'indices de similitude calcules. On peut extraire un objet, un groupe d'objets ou une image a partir d'une base de donnees d'images en fonction d'indices de similitude calcules d'une image requete.

Legal Status (Type, Date, Text)

Publication 20010215 A2 Without international search report and to be republished upon receipt of that report.  
Examination 20010531 Request for preliminary examination prior to end of 19th month from priority date  
Correction 20020718 Corrected version of Pamphlet: pages 1/9-9/9, drawings, replaced by new pages 1/9-9/9; due to late transmittal by the receiving Office  
Republication 20020718 A2 Without international search report and to be republished upon receipt of that report.

Fulltext Availability:  
Claims

Claim

... output; an image display device receiving said filtered image output from said image filter;  
an input device providing input parameters for modifying a filtering function **performed** by said image **filter**, whereby an image appearing on said image display device is updated substantially continuously as said filtering function is modified;  
a **database** of images; and  
an image comparison module configured to compare said filtered image output I 0 with objects, cluster of objects or images in said **database** and to select objects, cluster of objects or images in said **database** which are similar to said filtered image output.

23 In a digital image comparison system comprising an image database and a query image, a method...

13/5,K/42 (Item 42 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00398669 \*\*Image available\*\*

**SYSTEM AND METHOD FOR AUTOMATED RETRIEVAL OF INFORMATION**

**SYSTEME ET PROCEDE SERVANT A EXTRAIRE AUTOMATIQUEMENT DES INFORMATIONS**

Patent Applicant/Assignee:

ELECTRONIC DATA SYSTEMS CORPORATION,

Inventor(s):

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Patent and Priority Information (Country, Number, Date):

Patent: WO 9739412 A1 19971023

Application: WO 97US6387 19970418 (PCT/WO US9706387)

Priority Application: US 96634640 19960418

Designated States: AU CA JP NZ AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Main International Patent Class: G06F-017/30

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 8094

English Abstract

A system (10) for automated retrieval of information from one or more information sources (30) includes user parameters (14) that specify an attribute (114, 116, 118, 120) of a user (102). A library (18) contains filters (20) that each specify one or more search parameters for an associated attribute (114, 116, 118, 120). A translator (16) selects one or more filters (20) from the library (18) in accordance with the user parameters (14). A searcher (28) retrieves information from the information sources (30) using the selected filters (20).

French Abstract

Systeme (10) servant a effectuer le retrait automatique d'informations a

partir d'une ou de plusieurs sources d'informations (30) et comprenant des parametres d'utilisateur (14) indiquant un attribut (114, 116, 118, 120) d'un utilisateur (102). Une banque (18) contient des filtres (20) indiquant chacun un ou plusieurs parametres de recherche d'un attribut associe (114, 116, 118, 120). Un traducteur (16) selectionne un ou plusieurs filtres (20) depuis la banque (18) en fonction des parametres d'utilisateur (14). Un chercheur (28) extrait les informations depuis les sources d'informations (30) au moyen des filtres selectionnes (20).

Fulltext Availability:  
Claims

#### Claim

... with each user according to the attributes associated with the user. As discussed above, each filter 20 and custom filter 22 specifies one or more **search** parameters associated with the attributes of the user, such as a business role of the user, a vocation of the user, an industry of the user, or a business role of information. Due to the association of **search** parameters with user attributes, system 10 is able to **retrieve** selected information that is suitable for the particular information needs of each user each time the user requests information. For example, a filter 20 associated with a particular business role and selected for a user having that business role would contain different **search** parameters than a filter 20 associated with a different business role. Similarly, a filter 20 associated with a particular vocation, industry, or business role of information and selected for a user having that vocation, industry, or business role of information, respectively, would contain different **search** parameters than a filter 20 associated with a different vocation, industry, or business role of information, respectively. Translator 16 may also select is one or...

...after translator 16 selects a filter 20 or custom filter 22 for each attribute of the user, system 10 may generate and issue a separate **search** request for each selected filter 20 or custom filter 22. The information **retrieved** using the separate **search** requests might then be consolidated and correlated to eliminate duplicative **retrieved** information. Alternatively, system 10 may generate and issue one or more comprehensive **search** requests that each incorporates **search** parameters for more than one selected filter 20 or custom filter 22. If necessary, the information **retrieved** using the comprehensive **search** requests might be consolidated and correlated in a similar manner. Furthermore, translator 16 may manipulate the **search** parameters associated with the selected filters 20 so that system 10 may generate several **search** requests for each information request of the user, each **search** request varying to some degree from the other **search** requests for the same information request and the same user. As discussed below, after information has been **retrieved** using the several **search** requests, system 10 or the user may select the **search** request most effective in **retrieving** the selected information. The selected **search** request could then be used to satisfy subsequent information requests from the user. System 10 may generate and issue a series of nested **search** requests that first **retrieve** information according to a selected filter 20 that is broad, relative to other selected **filters** 20, and then **successively** reduce or narrow the **retrieved** information according to the other selected filters 20 to generate **search** results. For example, a relatively broad filter 20 corresponding to a particular business role might be used to **retrieve** information that

could be reduced by successively applying a series of relatively narrow filters 20 to the **retrieved** information, corresponding to a particular vocation, a particular industry, and a particular business role of information. The present invention contemplates some level of off-line **searching** capability performed by manipulator 38. whether **search** parameters are manipulated or combined before **search** requests are generated using filters 20 and custom filters 22 or whether the information **retrieved** using filters 20 and custom filters 22 is manipulated or combined in response to being **retrieved**, the present invention **retrieves** selected information according to user parameters 14 associated with each user.

18/5,K/3 (Item 3 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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00537211

**Data library system.**

**Datenbibliotheksystem.**

**Système de bibliothèque de données.**

PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 501701 A2 920902 (Basic)

EP 501701 A3 941214

APPLICATION (CC, No, Date): EP 92301486 920221;

PRIORITY (CC, No, Date): US 663096 910301

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-015/40 ; G06F-015/403

ABSTRACT EP 501701 A2

Library service protocols are provided for moving large data objects  
into an out of a data image library with attention to security,  
authentication, and consistency of related images stored in different  
machines. The protocol consists of partucular message sequences, special  
tokens within messages, and out-of-sequence database changes. (see image  
in original document)

ABSTRACT WORD COUNT: 54

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 920902 A2 Published application (Alwith Search Report  
;A2without Search Report)

Examination: 930317 A2 Date of filing of request for examination:  
930120

Change: 930609 A2 Inventor (change)

Change: 931006 A2 Representative (change)

Change: 941123 A2 Obligatory supplementary classification  
(change)

Search Report: 941214 A3 Separate publication of the European or  
International search report

Withdrawal: 960221 A2 Date on which the European patent application  
was withdrawn: 951227

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
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CLAIMS A	(English)	EPABF1	1648
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SPEC A	(English)	EPABF1	11628
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Total word count - document A			13276
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Total word count - document B			0
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Total word count - documents A + B			13276
------------------------------------	--	--	-------

INTERNATIONAL PATENT CLASS: G06F-015/40 ...

... G06F-015/403

...SPECIFICATION data schema and integrity rules. However, the inventors  
have found that the statistics and circumstances of library use are

sufficiently different from those of other **database** applications to warrant special attention. For example, compared to the records of a traditional **database**, objects in a library tend to be relatively large, relatively rarely read, very rarely changed, and not directly useful as **search** indices; to be economical, a library implementation must include an automatic storage hierarchy - a feature which is not found in traditional **database** management systems. For knowledge workers, it is neither desirable nor possible to predict to which libraries any particularly worker will need access; limited only by...

18/5,K/4 (Item 4 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00128384

**Method for storing and retrieving digital information.**

**Verfahren zum Speichern und Wiederauffinden von digitalen Informationen.**

**Procédé d'emmagasinage et de recherche d'informations numériques.**

PATENT ASSIGNEE:

WANG LABORATORIES INC., (333560), One Industrial Avenue, Lowell, MA 01851  
, (US), (applicant designated states: BE;DE;FR;GB)

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LEGAL REPRESENTATIVE:

Behrens, Dieter, Dr.-Ing. et al (1701), Wuesthoff & Wuesthoff Patent- und  
Rechtsanwalte Schweigerstrasse 2, D-81541 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 143164 A2 850605 (Basic)  
EP 143164 A3 890913  
EP 143164 B1 931006

APPLICATION (CC, No, Date): EP 84108233 840712;

PRIORITY (CC, No, Date): US 538682 831003

DESIGNATED STATES: BE; DE; FR; GB

INTERNATIONAL PATENT CLASS: **G06F-015/40**

CITED PATENTS (EP A): EP 51218 A

ABSTRACT EP 143164 A2

Method for storing and retrieving digital information.

An improved technique is presented for organizing digitized information for storage in a relational type tree memory structure where the digitized information is broken up into blocks of a fixed byte size which are then stored throughout the memory. A header is utilized which identifies a text or image and details of how the image was digitized and compressed, to be used in reconstructing the image properly. An index is also utilized in which is the image or text identity but also in which is an index identifying the locations throughout the memory at which the blocks containing the text or image information is stored. Each block has a header identifying what text or image information is stored in the block and having the address of any another block containing related information for the same text or image to thereby create a chaining between the blocks by which they may all be quickly located once a first block is located using the index. A further embodiment of invention allows the storing and display of a base image containing user defined and located subfields and the selective insertion of related data or images, either previously stored or entered by the user, into the subfields. A yet further embodiment allows the use of data contained in the subfields as keys to locate and display further related information.

ABSTRACT WORD COUNT: 234

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 850605 A2 Published application (Alwith Search Report  
;A2without Search Report)  
Change: 850731 A2 Title of invention (German) (change)  
Change: 850731 A2 Title of invention (French) (change)  
Search Report: 890913 A3 Separate publication of the European or

International search report

Examination: 900404 A2 Date of filing of request for examination: 900207  
 Examination: 901205 A2 Date of despatch of first examination report: 901018  
 Grant: 931006 B1 Granted patent  
 Oppn None: 940928 B1 No opposition filed  
 LANGUAGE (Publication,Procedural,Application): English; English; English  
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	364
CLAIMS B	(German)	EPBBF1	340
CLAIMS B	(French)	EPBBF1	415
SPEC B	(English)	EPBBF1	8705
Total word count - document A			0
Total word count - document B			9824
Total word count - documents A + B			9824

INTERNATIONAL PATENT CLASS: G06F-015/40

...SPECIFICATION the standard statistical and pricing information typically entered on cards may be entered in a system including a video display terminal and bulk memory. Using **data base searching** techniques, the stored information regarding houses for sale may be **searched** to select a list of houses of possible interest based on size, cost, or location of a house using information supplied by a potential buyer. The potential buyer will then review the results of such a **search** and will typically select a few of the houses in the **search** output list for closer review. The final result is one or more houses that the potential buyer actually wants to visit. To aid the potential...

...to minimize the number of visits, the use of the novel method and arrangement in such a relators office setting permits one large relationally oriented **data base** to include digitized information representing not only such things as the **statistical** data, but also such things as house floor **plans**, property plot plans and photographs of the outside and inside of each house. After indicating a house of interest and operating one or two additional...

18/5,K/22 (Item 18 from file: 349)

DIALOG(R) File 349: PCT FULLTEXT

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00813246 \*\*Image available\*\*

A METHOD FOR A GRAPHICAL USER INTERFACE SEARCH FILTER GENERATOR

PROCEDE DE GENERATION D'UN FILTRE DE RECHERCHE D'INTERFACE GRAPHIQUE UTILISATEUR

Patent Applicant/Assignee:

ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US  
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Inventor(s):

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Legal Representative:

HICKMAN Paul L (agent), Hickman Coleman & Hughes, LLP, P.O. Box 52037,  
 Palo Alto, CA 94303, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200146868 A2 20010628 (WO 0146868)

Application: WO 2000US35257 20001222 (PCT/WO US0035257)

Priority Application: US 99469402 19991222; US 99471466 19991222; US  
 99470294 19991222; US 99470214 19991222; US 99469401 19991222

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES

FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD

MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ

VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW



(EA) AM AZ BY KG KZ MD RU TJ TM  
Main International Patent Class: G06F-017/30  
Publication Language: English  
Filing Language: English  
Fulltext Availability:  
Detailed Description  
Claims  
Fulltext Word Count: 24826

#### English Abstract

A system, method and article of manufacture are provided for allowing selection of filtering criteria during a search utilizing a network. A query field is displayed for entering a search query. The search query entered in the query field is received and a plurality of filters are presented which are applicable during a search utilizing the network. Selection of one or more of the filters is allowed and information relating to the search query is searched utilizing the network. Portions of the information are excluded based on the selected filters to generate a result which is then outputted.

#### French Abstract

L'invention concerne un systeme, un procede et un article de fabrication permettant la selection de criteres de filtrage au cours d'une recherche utilisant un reseau. Un champ de requete est affiche afin d'entrer une requete de recherche. La requete de recherche entree dans le champ de requete est recu et plusieurs filtres sont presentes, applicables au cours d'une recherche utilisant le reseau. La selection d'au moins un des filtres est possible et les informations relatives ala requete de recherche sont recherchees au moyen du reseau. Des parties des informations sont rejetees sur la base des filtres selectionnes afin de generer un resultat qui est ensuite emis.

#### Legal Status (Type, Date, Text)

Publication 20010628 A2 Without international search report and to be republished upon receipt of that report.  
Examination 20011122 Request for preliminary examination prior to end of 19th month from priority date

#### Main International Patent Class: G06F-017/30

Fulltext Availability:  
Detailed Description

#### Detailed Description

... retrieves the profiles 3520 from the profile database 3530 (which includes product ratings) of those users who have previously rated that product.

Then the system **retrieves** the default thresholds 3540 for the profile matching algorithm from the content **database** 3550. It then maps all of the short list of users along several dimensions specified in the profile matching algorithm 3560. The top n (specified...product ratings from the smaller set of n nearest neighbors are then used to determine a number of product statistics 3590 along several dimensions. Those **statistics** are inserted into a product report **template** 3595 and returned to the user 3597 as a product report.

Personal Profile and Services Ubiquity.

In accordance with an embodiment of the present invention...

18/5,K/26 (Item 22 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00577717 \*\*Image available\*\*  
SEARCH ENGINE DATABASE AND INTERFACE  
BASE DE DONNEES ET INTERFACE POUR MOTEUR DE RECHERCHE

Patent Applicant/Assignee:

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PARSONS John A,  
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KNUPP Roger,  
DEVORE Kristi,  
EARY Matt,  
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BRODERICK Mike,  
SHOMO William,  
LEE wayne,

Inventor(s):

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ROBERTS John,  
ELLSWORTH Corey,  
KNUPP Roger,  
DEVORE Kristi,  
EARY Matt,  
FAIR Susan,  
BRODERICK Mike,  
SHOMO William,  
LEE wayne,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200041090 A1 20000713 (WO 0041090)  
Application: WO 2000US455 20000110 (PCT/WO US0000455)  
Priority Application: US 99115353 19990108; US 99117975 19990129; US  
99119187 19990208; US 99119495 19990210; US 99119636 19990211; US  
99120865 19990219; US 99122357 19990302; US 99124091 19990312; US  
99129140 19990413

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK  
DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ  
TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM  
AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL  
PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Main International Patent Class: **G06F-015/16**

International Patent Class: **G06F-017/30**

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 41702

English Abstract

Internet related local commerce applications are facilitated by a geographically coded search engine database (2). Various user interface features (3, 5, 6, 7, 8, 9, 10, 21, 22, 33) are presented substantially simplifying searching of geographically coded Internet pages. Standard directories are also integrated into Internet based searches to provide greater feedback to users of the system.

French Abstract

Les applications commerciales locales liees a l'Internet sont facilitees par une base de donnees de moteur de recherche codee geographiquement (2). Plusieurs caracteristiques d'interface utilisateur (3, 5, 6, 7, 8, 9, 10, 21, 22, 33) sont presentees, et elles permettent de simplifier sensiblement la recherche de pages Internet codees geographiquement. Des repertoires standards sont egalement integres aux recherches sur Internet, et ce en vue de fournir davantage de reactions aux utilisateurs du systeme.

Main International Patent Class: G06F-015/16

International Patent Class: G06F-017/30

Fulltext Availability:

Claims

Claim

... FIG, 1A

30

3 1 3 12)

2 1

PSTN

2

BASE

STATION

G TEWA ISP SERVER

23

3

a

36b

36f

36c

T

@4

**SEARCH** YELLOW

1 0 PROVIDER'S PAGES'

WEB SERVER B SERVER

INTE ET

SPIDER

j-) 26

**SEARCH** YELLOW

ENGINE PAGES'

ENGINE

2 27-)

RCH YELLOW

ENGINE PAGES'

**DATABASE** **DATABASE**

SUBSTITUTE SHIXT (RULE 26)

FIG, 1 B 5 3 6

OTHER **SEARCH** THE MAPPING

RING ENGINES, e.g., USER SERVICES

SPIDE YAHOO

SERVICES

LISTING

File 8: Ei Compendex(R) 1970-2003/Jun W1  
(c) 2003 Elsevier Eng. Info. Inc.  
File 35: Dissertation Abs Online 1861-2003/May  
(c) 2003 ProQuest Info&Learning  
File 202: Info. Sci. & Tech. Abs. 1966-2003/May 14  
(c) Information Today, Inc  
File 65: Inside Conferences 1993-2003/Jun W2  
(c) 2003 BLDSC all rts. reserv.  
File 2: INSPEC 1969-2003/Jun W1  
(c) 2003 Institution of Electrical Engineers  
File 233: Internet & Personal Comp. Abs. 1981-2003/May  
(c) 2003 Info. Today Inc.  
File 94: JICST-EPlus 1985-2003/Jun W2  
(c) 2003 Japan Science and Tech Corp (JST)  
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(c) 2001 ProQuest Info&Learning  
File 483: Newspaper Abs Daily 1986-2003/Jun 09  
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File 6: NTIS 1964-2003/Jun W1  
(c) 2003 NTIS, Intl Cpyrght All Rights Res  
File 144: Pascal 1973-2003/May W4  
(c) 2003 INIST/CNRS  
File 434: SciSearch(R) Cited Ref Sci 1974-1989/Dec  
(c) 1998 Inst for Sci Info  
File 34: SciSearch(R) Cited Ref Sci 1990-2003/Jun W1  
(c) 2003 Inst for Sci Info  
File 99: Wilson Appl. Sci & Tech Abs 1983-2003/Apr  
(c) 2003 The HW Wilson Co.  
File 583: Gale Group Globalbase(TM) 1986-2002/Dec 13  
(c) 2002 The Gale Group  
File 266: FEDRIP 2003/Apr  
Comp & dist by NTIS, Intl Copyright All Rights Res  
File 95: TEME-Technology & Management 1989-2003/May W4  
(c) 2003 FIZ TECHNIK  
File 438: Library Lit. & Info. Science 1984-2003/Apr  
(c) 2003 The HW Wilson Co

Set	Items	Description
S1	4871141	RULE? ? OR TEMPLATE? ? OR STRATEGY OR STRATEGIES OR FILTER? ? OR PLAN OR PLANS OR POLICY OR POLICIES OR QUERY OR SEARCH
S2	228611	S1(5N) (PERFORMANCE OR PERFORMED OR PROFICIEN? OR EFFECTIV? OR EFFICIEN? OR SUCCESS?)
S3	31088	S2(5N) (MEASUR? OR ASSESS? OR EVALUAT? OR ANALYZ? OR ANALYS? OR CHECK??? OR GAUG??? OR QUANTIF? OR JUDG???)
S4	33417	S1(10N) STATISTIC?
S5	722198	DATABASE? ? OR DATA()BASE? ? OR REPOSITOR??? OR SEARCH()EN- GINE? ?
S6	2760	S3 AND S5
S7	4391776	RULE? ? OR TEMPLATE? ? OR STRATEGY OR STRATEGIES OR FILTER? ? OR PLAN OR PLANS OR POLICY OR POLICIES
S8	82662	(PERFORMANCE OR PERFORMED OR PROFICIEN? OR EFFECTIV? OR EF- FICIEN? OR SUCCESS?) (3W) S7
S9	8291	S8(3N) (MEASUR? OR ASSESS? OR EVALUAT? OR ANALYZ? OR ANALYS? OR CHECK??? OR GAUG??? OR QUANTIF? OR JUDG???)
S10	459	S5 AND S9
S11	11395173	DATA OR INFORMATION OR OBJECT? ? OR CONTENT? ? OR DOCUMENT? ? OR RECORD? ? OR FILE? ?
S12	3136976	MEDIA OR MULTIMEDIA OR URL? ? OR UNIFORM()RESOURCE OR PAGE? ? OR WEBPAGE? ? OR SITE? ? OR WEBSITE? ?
S13	6107615	IMAGE? ? OR GRAPHIC? ? OR PICTURE? ? OR PHOTO? ? OR PHOTOG- RAPH? ? OR MUSIC OR SOUND OR AUDIO OR RECORDING? ? OR MOVIE? ? OR FILM? ?
S14	284730	S11:S13(5N) (SEARCH??? OR RETRIEV? OR QUER???)
S15	79	S10 AND S14
S16	56	RD (unique items)
S17	49	S16 NOT PY=2001:2003
S18	29400	S7(10N) STATISTIC?
S19	1412	S5 AND S18

S20	201	S14 AND S19
S21	1283	S2(5N)STATISTIC?
S22	115	S5 AND S21
S23	86	RD (unique items)
S24	61	S23 AND (SEARCH??? OR RETRIEV? OR QUER????)
S25	54	S24 NOT PY=2001:2003
S26	385	S8(5N)STATISTIC?
S27	24	S26 AND S5
S28	15	RD (unique items)
S29	6	S28 NOT S25

17/5/4 (Item 4 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

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05412695 E.I. No: EIP99114893526

**Title: Semantic query optimization for ODMG-93 databases**

Author: van Bommel, M.F.

Corporate Source: St. Francis Xavier Univ, Antigonish, NS, Can

Conference Title: Proceedings of the 1999 International Database Engineering and Application Symposium, IDEAS'99

Conference Location: Montreal, Que, Can Conference Date: 19990802-19990804

Sponsor: Concordia University

E.I. Conference No.: 55503

Source: Proceedings of the International Database Engineering and Applications Symposium, IDEAS 1999. p 16-23

Publication Year: 1999

CODEN: 002754

Language: English

Document Type: JA; (Journal Article) Treatment: T; (Theoretical)

Journal Announcement: 9912W3

Abstract: We present a graphical technique for semantic query optimization for ODMG-93 compliant **databases**. The OQL **object query** is represented as a graph based on the information contained in the ODL object schema. The graph reflects the constraints on possible **objects** satisfying the **query**. Vertices represent **objects**, which may be members of interfaces, ranges of values, constant values, objects returned by subqueries, object collections (count, sum, etc.), or constructs (sets, lists, etc). Key constraints and inverse relationships contained in the schema are used to perform join elimination, join simplification, and scan reduction via graph transformations. A marking scheme on the graph is used to perform subquery to join transformations and the detection of unnecessary duplication elimination. We argue that our approach generalizes previous research on **object**-based **query** optimization by providing a more natural representation of the query allowing simpler, more intuitive transformations, and leading to more **efficient evaluation plans**.

(Author abstract)

Descriptors: **Query** languages; Optimization; Graph theory; **Data** structures; Knowledge acquisition; Constraint theory; **Database** systems; Standards

Identifiers: Semantic **query** optimization; **Object** database standard; Marking scheme

Classification Codes:

723.3 (Database Systems); 921.5 (Optimization Techniques); 921.4 (Combinatorial Mathematics, Includes Graph Theory, Set Theory); 723.2 (Data Processing); 723.4 (Artificial Intelligence); 902.2 (Codes & Standards)

723 (Computer Software); 921 (Applied Mathematics); 902 (Engineering Graphics & Standards)

72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS); 90 (GENERAL ENGINEERING)

17/5/5 (Item 5 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

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05279445 E.I. No: EIP99054668766

**Title: Deriving orthogonality to optimize the search for summary data**

Author: Wang, X. Sean; Li, Chang

Corporate Source: George Mason Univ, Fairfax, VA, USA

Source: Information Systems v 24 n 1 Mar 1999. p 47-65

Publication Year: 1999

Language: English

Document Type: JA; (Journal Article) Treatment: A; (Applications); G; (General Review)

Journal Announcement: 9906W5

Abstract: An **effective** optimization **strategy** for **evaluating**

statistical queries is to use pre-computed summary data on certain categories. An important step in this strategy is to compare categories for containment in order to decide whether the summary data on one category can be used to compute the summary on another. This paper studies optimization for such comparisons. A category in this paper is represented by a relation whose attributes are partitioned into pair-wise disjoint sets, each called a dimension. A category is said to be orthogonal if it is equal to the cross product of the projections of itself on all the dimensions, and k-partially orthogonal if it is the union of k orthogonal ones. Comparing k-partially orthogonal categories for containment is computationally much easier than comparing arbitrary categories if k is small and all the orthogonal subcategories are known. It is shown however that it is computationally intractable (NP-hard) to partition an arbitrarily given category into the smallest number of orthogonal subcategories. In order to avoid this intractable task but still take advantage of orthogonality, this paper investigates methods that derive orthogonality in categories which are results of relational queries, assuming the orthogonality in input categories is known. The methods are based on a careful examination of each relational operation and on certain auxiliary constructs for labelling orthogonal subcategories. (Author abstract)

Descriptors: **Query** languages; Relational **database** systems; **Data** mining; Data structures; Computational complexity; Online systems; Optimization; Information theory

Identifiers: Online analytical processing (OLAP); Statistical **databases**; Relational queries

Classification Codes:

723.3 (Database Systems); 723.2 (Data Processing); 721.1 (Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory); 722.4 (Digital Computers & Systems); 921.5 (Optimization Techniques); 716.1 (Information & Communication Theory)

723 (Computer Software); 721 (Computer Circuits & Logic Elements); 722 (Computer Hardware); 921 (Applied Mathematics); 716 (Radar, Radio & TV Electronic Equipment)

72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS); 71 (ELECTRONICS & COMMUNICATIONS)

17/5/6 (Item 6 from file: 8)

DIALOG(R)File 8: Ei Compendex(R)

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05069098 E.I. No: EIP98074300950

**Title: Evaluation of information-seeking performance in hypermedia digital libraries**

Author: Salampasis, Michail; Tait, John; Bloor, Chris

Corporate Source: Univ of Sunderland, Sunderland, UK

Source: Interacting with Computers v 10 n 3 Jun 1998. p 269-284

Publication Year: 1998

CODEN: INTCEE ISSN: 0953-5438

Language: English

Document Type: JA; (Journal Article) Treatment: G; (General Review)

Journal Announcement: 9809W3

Abstract: Nowadays, we are witnessing the development of new information-seeking environments and applications such as hypermedia digital libraries. **Information Retrieval** (IR) is increasingly embedded in these environments and plays a cornerstone role. However, in hypermedia digital libraries IR is a part of a large and complex user-centred information-seeking environment. In particular, information seeking is also possible using non-analytical, opportunistic and intuitive browsing strategies. This paper discusses the particular evaluation problems posed by these current developments. Current methods based on Recall (R) and Precision (P) for evaluating IR are discussed, and their suitability for evaluating the performance of hypermedia digital libraries is examined. We argue that these evaluation methods cannot be directly applied, mainly because they do not **measure** the **effectiveness** of browsing **strategies**; the underlying notion of relevance ignores the highly interconnected nature of hypermedia information and misses the reality of how information seekers work in these environments. Therefore, we propose a new quantitative

evaluation methodology, based on the structural analysis of hypermedia networks and the navigational and **search** state patterns of **information** seekers. Although the proposed methodology retains some of the characteristics (and criticisms) of R and P evaluations, it could be more suitable than them for measuring the performance of information-seeking environments where information seekers can utilize arbitrary mixtures of browsing and query-based searching strategies. (Author abstract)

Descriptors: **Information** retrieval systems; Online **searching** ;

**Database** systems

Identifiers: Hypermedia digital libraries

Classification Codes:

903.3 (Information Retrieval & Use); 722.4 (Digital Computers & Systems); 723.3 (Database Systems)

903 (Information Science); 722 (Computer Hardware); 723 (Computer Software)

90 (GENERAL ENGINEERING); 72 (COMPUTERS & DATA PROCESSING)

17/5/8 (Item 8 from file: 8)

DIALOG(R)File 8: Ei Compendex(R)

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04703424 E.I. No: EIP97053662807

**Title:** Semantic query optimization for object databases

**Author:** Grant, J.; Gryz, J.; Minker, J.; Raschid, L.

**Corporate Source:** Towson State Univ, Towson, MD, USA

**Conference Title:** Proceedings of the 1997 IEEE 13th International Conference on Data Engineering, ICDE

**Conference Location:** Birmingham, UK **Conference Date:** 19970407-19970411

**Sponsor:** IEEE

**E.I. Conference No.:** 46391

**Source:** Proceedings - International Conference on Data Engineering 1997. IEEE, Los Alamitos, CA, USA, 97CB36038. p 444-453

**Publication Year:** 1997

**CODEN:** PIDEEG

**Language:** English

**Document Type:** CA; (Conference Article) **Treatment:** G; (General Review); T; (Theoretical)

**Journal Announcement:** 9707W3

**Abstract:** We present a technique for semantic **query** optimization (SQO) for **object** **databases** . We use the ODMG-93 standard ODL and OQL languages. The ODL **object** schema and the OQL **object** **query** are translated into a DATALOG representation. Semantic knowledge about the object model and the particular application is expressed as integrity constraints. This is an extension of the ODMG-93 standard. SQO is performed in the DATALOG representation and an equivalent logic **query** , and subsequently an equivalent OQL **object** **query** , are obtained. SQO is based on the residue technique of left bracket 3 right bracket . We show that our technique generalizes previous research on SQO for object **databases** . It can be applied to queries with structure constructors and method application. It utilizes integrity constraints about keys, methods, and knowledge of access support relations, to produce equivalent queries, which may have more **efficient** **evaluation** **plans** . (Author abstract) 17 Refs.

Descriptors: **Query** languages; Optimization; **Object** oriented programming; **Data** structures; Computational linguistics; Formal logic

Identifiers: Semantic query optimization (SQO)

Classification Codes:

723.3 (Database Systems); 921.5 (Optimization Techniques); 723.1 (Computer Programming); 723.2 (Data Processing); 721.1 (Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory)

723 (Computer Software); 921 (Applied Mathematics); 721 (Computer Circuits & Logic Elements)

72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS)

17/5/12 (Item 12 from file: 8)

DIALOG(R)File 8: Ei Compendex(R)



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03953269 E.I. No: EIP94101422850

**Title: Sequence query processing**

Author: Seshadri, Praveen; Livny, Miron; Ramakrishnan, Raghu

Corporate Source: Univ of Wisconsin, Madison, WI, USA

Conference Title: Proceedings of the 1994 ACM SIGMOD International Conference on Management of Data

Conference Location: Minneapolis, MN, USA Conference Date: 19940524-19940527

Sponsor: SIGMOD

E.I. Conference No.: 20693

Source: Proceedings of the ACM SIGMOD International Conference on Management of Data v 23 n 2 Jun 1994. Publ by ACM, New York, NY, USA. p 430-441

Publication Year: 1994

CODEN: 000462 ISBN: 0-89791-639-5

Language: English

Document Type: CA; (Conference Article) Treatment: A; (Applications)

Journal Announcement: 9411W3

Abstract: Many applications require the ability to manipulate sequences of data. We motivate the importance of sequence query processing, and present a framework for the optimization of sequence queries based on several novel techniques. These include **query** transformations, optimizations that utilize meta-**data**, and caching of intermediate results. We present a bottom-up algorithm that generates an **efficient** query **evaluation plan** based on cost estimates. This work also identifies a number of directions in which future research can be directed. (Author abstract) Refs.

Descriptors: Query languages; **Database** systems; Algorithms; Optimization; Cost accounting

Identifiers: Sequence query processing

Classification Codes:

723.1.1 (Computer Programming Languages)

723.1 (Computer Programming); 723.3 (Database Systems); 911.1 (Cost Accounting)

723 (Computer Software); 911 (Industrial Economics)

72 (COMPUTERS & DATA PROCESSING); 91 (ENGINEERING MANAGEMENT)

17/5/20 (Item 1 from file: 202)

DIALOG(R)File 202:Info. Sci. & Tech. Abs.

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3703230

**A survey of Internet searches and their results.**

Author(s): Barnett, Andy

Corporate Source: McMillan Memorial Library, Wisconsin Rapids, WI

Reference & User Services Quarterly vol. 39, no. 2, pages 177-181

Publication Date: Winter 1999

ISSN: 1094-9054

Journal URL: <http://www.ala.org/rusa/rusq>

Publisher URL: <http://www.ala.org>

Language: English

Document Type: Journal Article

Record Type: Abstract

Journal Announcement: 3708

When the Internet is considered an information medium (versus an entertainment medium), the extent that users are able to find that they are seeking is a measure of the Internet's usefulness. About 85% of users go to a search tool when they want to locate something, and search tools are some of the busiest and most profitable **sites** on the Web. What methods **searchers** use and how well the various methods work has implications for those instructing new Internet users. Looks at actual searches to determine what kinds of searchers users are performing and how successful various types of searches are. Categorizes the searches according to the search operators used, including **search engine** math, phrase searches, Boolean

logic, natural word searches, and Web address searches. **Assesses** the relative **success** of the various **strategies**, and considers the implications for user education.

Descriptors: **Information retrieval**; **Search strategies**; User behavior; **Information literacy**

Classification Codes and Description: 1.4 (**Information retrieval research**); 1.5 (User behavior and uses of information systems); 10.6 (Education and training)

Main Heading: Information Science Research; Information Science Research; Libraries and Library Services

17/5/22 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

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6604279 INSPEC Abstract Number: C2000-07-7210N-015

**Title: Optimization of run-time management of data intensive Web sites**

Author(s): Florescu, D.; Levy, A.; Suciu, D.; Yagoub, K.

Author Affiliation: INRIA, Rocquencourt, France

Conference Title: Very Large Data Bases. Proceedings of the Twenty-Fifth International Conference on Very Large Data Bases p.627-38

Editor(s): Atkinson, M.; Orlowska, M.E.; Valduriez, P.; Zdonik, S.; Brodie, M.

Publisher: Morgan Kaufmann Publishers, Orlando, FL, USA

Publication Date: 1999 Country of Publication: USA xviii+761 pp.

Material Identity Number: XX-1999-02812

Conference Title: Proceedings of 25th International Conference on Very Large Databases

Conference Sponsor: Oracle; Sun Microsystems.; IBM; Microsoft SQLServer7.0; Scottish Widows

Conference Date: 7-10 Sept. 1999 Conference Location: Edinburgh, UK

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: An increasing number of Web sites have their data extracted from relational **databases**. Several commercial products and research prototypes have been moving in the direction of declarative specification of the sites' structure and content. Specifically, the entire site is specified using a collection of **queries** describing the **site's** nodes (corresponding to Web pages and the data contained in them) and edges (corresponding to the hyperlinks). Given this paradigm, an important issue is when to compute the site's pages. Two extreme approaches, with obvious drawbacks, are: (1) to precompute the entire site in advance; and (2) to evaluate on demand all the **queries** necessary to construct a given **page**. We consider the problem of automatically optimizing the run-time management of declaratively specified Web sites. In our approach, given a declarative site specification and constraints on the application, an **efficient run-time evaluation policy** is automatically derived. An evaluation policy specifies which data to compute at a given browser request. We describe several optimizations that can be used in run-time policies, focusing mostly on optimizations that exploit the structure of the Web site. We evaluate experimentally the impact of these optimizations on a Web site derived from the TPC/D **database**. Finally, we describe a heuristic-based optimization algorithm which compiles a declarative site specification into a run-time policy that incorporates the proposed optimizations. (25 Refs)

Subfile: C

Descriptors: formal specification; hypermedia; information resources; query processing; relational **databases**; very large **databases**

Identifiers: data intensive Web sites; relational **databases**; declarative specification; site structure; site content; queries; site nodes; Web pages; hyperlinks; site edges; run-time management; run-time policies; TPC/D **database**; heuristic-based optimization; very large **databases**

Class Codes: C7210N (Information networks); C6160D (Relational databases); C6110F (Formal methods); C6130M (Multimedia); C6160Z (Other DBMS)

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17/5/26 (Item 6 from file: 2)  
DIALOG(R)File 2:INSPEC  
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5863188 INSPEC Abstract Number: C9804-4250-020

**Title: Overview of dynamic query evaluation in intensional query optimization**

Author(s): Godfrey, P.; Gryz, J.  
Author Affiliation: U.S. Army Res. Lab., Adelphi, MD, USA  
Conference Title: Deductive and Object-Oriented Databases. 5th International Conference, DOOD '97. Proceedings p.425-6  
Editor(s): Bry, F.; Ramakrishnan, R.; Ramamohanarao, K.  
Publisher: Springer-Verlag, Berlin, Germany  
Publication Date: 1997 Country of Publication: Germany xiv+430 pp.  
ISBN: 3 540 63792 3 Material Identity Number: XX97-03001  
Conference Title: Deductive and Object-Oriented Databases. 5th International Conference, DOOD'97. Proceedings  
Conference Date: 8-12 Dec. 1997 Conference Location: Montreaux, Switzerland

Language: English Document Type: Conference Paper (PA)

Treatment: Theoretical (T)

Abstract: P. Godfrey and J. Gryz (1996) introduced a new query optimization framework called intensional query optimization (IQO). This framework enables existing optimization techniques to be applied to queries over views that employ unions. Advanced **database** technologies and applications such as federation and mediation over heterogeneous **database** sources, **object** oriented **databases** and **query** languages, and **data** warehousing for decision support readily lead to such complex view definitions, and thus tend to incur complex, expensive queries. The IQO framework provides that some of the query's expansions, also called unfoldings, may be explicitly "separated out" of the query. It defines the notion of a discounted query, which is the query annotated to the effect that some of its expansions have been removed. (These removed expansions are called the unfoldings to discount.) Thus this offers us a way to recast complex queries, which use unions, into pieces for which we may have good optimizations. The query's answer set is then equivalent to the union of the answer sets of the unfoldings to discount plus the answer set of the discounted query. For this to be a viable overall optimization strategy, it must be possible to evaluate a discounted query less expensively than the query itself; indeed less expensively than the query itself less the cost of evaluating each unfolding to discount. We contend this is possible, and we motivate and sketch an **efficient evaluation strategy** for discounted queries. (3 Refs)

Subfile: C

Descriptors: **database** theory; query processing

Identifiers: dynamic query evaluation; intensional query optimization; query optimization framework; IQO; optimization techniques; advanced **database** technologies; federation; mediation; heterogeneous **database** sources; object oriented **databases** ; query languages; data warehousing; decision support; complex view definitions; expensive queries.; IQO framework; unfoldings; discounted query; complex queries; answer set; evaluation strategy

Class Codes: C4250 (Database theory); C6160 (Database management systems (DBMS))

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17/5/35 (Item 2 from file: 6)  
DIALOG(R)File 6:NTIS  
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1714099 NTIS Accession Number: N93-17590/9

**Semantic Query Optimization in Distributed Database Systems: A Knowledge-Based Approach**

(Ph.D. Thesis)

Vankuik, H. J. A.

Technische Univ. Twente, Enschede (Netherlands).

Corp. Source Codes: 090700000; U1294434

Report No.: ISBN-90-9003849-3; ETN-92-92534

c1991 200p

Languages: English Document Type: Thesis

Journal Announcement: GRAI9310; STAR3105

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NTIS Prices: PC A09/MF A03

Country of Publication: Netherlands

An approach to semantic query optimization in distributed **database** systems is described. Query optimization is defined as searching for the most **efficient** query **evaluation** **plan** given a query expression, a **database** state, and the **database** system characteristics. This search program is recognized to be NP hard. The problem of searching the potentially large search spaces of equivalent expressions is attacked by a combination of multilevel search method and powerful heuristics. The problem of query optimization is decomposed into a number of basic transformation problems. A possible realization of the query optimizer as a knowledge system is discussed.

Descriptors: **Data bases** ; \* **Data retrieval** ; \*Distributed processing ; \*Expert systems; \*Knowledge bases (Artificial intelligence); \*Optimization; \*Query languages; \*Semantics; Algorithms; Architecture (Computers); Heuristic methods; Theorem proving; Theorems; Transformations (Mathematics)

Identifiers: \*Foreign technology; Theses; NTISNASAE

Section Headings: 62B (Computers, Control, and Information Theory--Computer Software); 62GE (Computers, Control, and Information Theory--General); 88B (Library and Information Sciences--Information Systems)

17/5/37 (Item 1 from file: 144)

DIALOG(R)File 144:Pascal

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14816391 PASCAL No.: 00-0498878

**When information retrieval measures agree about the relative quality of document rankings**

LOSEE R M

SILS, Manning Hall, CB#3360, University of North Carolina-Chapel Hill, Chapel Hill, NC 27599-3360, United States

Journal: Journal of the American Society for Information Science, 2000, 51 (9) 834-840

ISSN: 0002-8231 CODEN: AISJB6 Availability: INIST-6025; 354000088829620050

No. of Refs.: 32 ref.

Document Type: P (Serial) ; A (Analytic)

Country of Publication: United States

Language: English

The variety of performance measures available for **information** retrieval systems, **search engines**, and network filtering agents can be confusing to both practitioners and scholars. Most discussions about these measures address their theoretical foundations and the characteristics of a measure that make it desirable for a particular application. In this work, we consider how measures of performance at a point in a search may be formally compared. Criteria are developed that allow one to determine the percent of time or conditions under which two different performance measures suggest that one document ordering is superior to another ordering, or when the two measures disagree about the relative value of document orderings. As an example, graphs provide illustrations of the relationships between precision and F.

English Descriptors: **Information retrieval** ; **Performance evaluation** ; Filing; **Filter** ; **Measurement** ; Algorithm; Ordering; Comparative study; Accuracy; F distribution

French Descriptors: Recherche information; Evaluation performance;  
Classement; Filtre; Mesure; Algorithme; Relation ordre; Etude comparative  
; Precision; Loi F

Classification Codes: 001A01E03C; 205

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17/5/41 (Item 5 from file: 144)  
DIALOG(R)File 144:Pascal  
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13004781 PASCAL No.: 97-0287842  
**Directory assistance on FirstSearch : Prospects and potential**  
SALISBURY L; BATSON D  
University of Arkansas, Fayetteville, United States  
Journal: Information technology and libraries, 1997, 16 (1) 38-43  
ISSN: 0730-9295 CODEN: ITLBDC Availability: INIST-13941;  
354000065280210060  
No. of Refs.: 10 ref.  
Document Type: P (Serial) ; A (Analytic)  
Country of Publication: United States  
Language: English  
This paper highlights the advantages in using the Pro CD **database** on FirstSearch. It also identifies some weaknesses for business use and the constraints caused by the system. We provide guidelines and searching tips that will aid in maximum retrieval, usefulness of results, and cost-effectiveness.

English Descriptors: **Database** ; World wide web; Directory; Telephone; On line; **Information** retrieval; Compact disk; **Information** access;  
**Performance evaluation** ; **Search strategy** ; Cost **analysis**  
Broad Descriptors: Information technology; Technologie information;  
Tecnologia informacion

French Descriptors: Base donnee; Reseau WWW; Repertoire; Telephone; En ligne; Recherche information; Disque compact; Acces information;  
Evaluation performance; Strategie recherche; Analyse cout; FirstSearch;  
Pro CD; Select Phone

Classification Codes: 001A01E03C; 205

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17/5/44 (Item 8 from file: 144)  
DIALOG(R)File 144:Pascal  
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07848185 PASCAL No.: 87-0327945  
**Performance analysis of a database filter search hardware**  
PRAMANIK S  
Michigan state univ., dep. computer sci., East Lansing MI 48823, USA  
Journal: IEEE transactions on computers, 1986, 35 (12) 1077-1082  
ISSN: 0018-9340 Availability: CNRS-222F4  
No. of Refs.: 12 ref.  
Document Type: P (Serial) ; A (Analytic)  
Country of Publication: USA  
Language: ENGLISH

English Descriptors: **Performance** analysis; **Search** algorithm; **Filter** ;  
**Database** ; **Information** retrieval ; **Associati** ve storage; **Search** key;  
**Data** flow; Hardware; Logic circuit

French Descriptors: Analyse performance; Algorithmes recherche; Filtre; Base  
donnee; Recherche information; Memoire associative; Cle recherche; Flot  
donnee; Matériel(informatique); Circuit logique

Classification Codes: 001D02B10

17/5/45 (Item 1 from file: 34)

DIALOG(R) File 34:SciSearch(R) Cited Ref Sci  
(c) 2003 Inst for Sci Info. All rts. reserv.

09257543 Genuine Article#: 384KY Number of References: 27

**Title: Performance analysis of parallel query processing algorithms for  
object-oriented databases**

Author(s): Su SYW (REPRINT) ; Ranka S; He X

Corporate Source: Univ Florida, Dept Comp & Informat Sci & Engrn, Database  
Syst & Dev Ctr, 470 CSE/Gainesville//FL/32611 (REPRINT); Univ  
Florida, Dept Comp & Informat Sci & Engrn, Database Syst & Dev  
Ctr, Gainesville//FL/32611; Microsoft Corp, Kirkland//MA/

Journal: IEEE TRANSACTIONS ON KNOWLEDGE AND DATA ENGINEERING, 2000, V12, N6  
(NOV-DEC), P979-997

ISSN: 1041-4347 Publication date: 20001100

Publisher: IEEE COMPUTER SOC, 10662 LOS VAQUEROS CIRCLE, PO BOX 3014, LOS  
ALAMITOS, CA 90720-1314 USA

Language: English Document Type: ARTICLE

Geographic Location: USA

Journal Subject Category: COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE;  
COMPUTER SCIENCE, INFORMATION SYSTEMS; ENGINEERING, ELECTRICAL &  
ELECTRONIC

**Abstract:** In recent years, parallel processing and optimization algorithms  
for processing object-oriented **databases** have drawn a considerable  
amount of attention from the **database** research community. Two general  
types of algorithms have been introduced: hybrid-hash pointer-based  
algorithms and multiwavefront algorithms. In this work, we  
quantitatively analyze the two algorithms and develop analytical  
formulas to capture the main performance features of these two  
approaches. We study their performance in three application  
environments: One is characterized by large **databases** having many  
object classes, each of which contains a large number of instances; the  
second one is characterized by large **databases** having many object  
classes, each of which contains a relatively small number of  
instances; and the third one is by large **databases** having object  
classes of varying sizes. A horizontal data partitioning strategy, in  
which each object class is partitioned into horizontal segments stored  
across all processors, is used in the first environment. A  
class-per-node assignment strategy, in which instances of each object  
class are stored in a single processor, is used in the second  
environment. In the third environment, object classes are partitioned  
horizontally and assigned to a varying number of processors depending  
on their different sizes. Our analytical results show that the  
multiwavefront algorithm has three distinguishing features which  
contribute to its better performance: 1) two-phase processing strategy,  
2) vertical partitioning of horizontal segments, and 3) dynamic  
determination of "collision point" in multiwavefront propagations which  
results in an optimized query execution plan. We show that if these  
features are adopted by a hybrid-hash, pointer-based algorithm, its  
performance will be comparable with that of the multiwavefront  
algorithm because the difference in CPU time between them is  
negligible. The assumed computing environment is a network of  
workstations having a share-nothing architecture. The schema and some  
queries selected from the OO7 benchmark are used in the performance  
analyses and comparisons. The **queries** are modified slightly in  
different **data** environments in order to reflect the features of  
diverse **database** applications.

Descriptors--Author Keywords: **object-oriented databases** ; parallel  
query processing algorithms ; **performance analysis** ; **data**  
partitioning **strategies** ; **database benchmark**

Identifiers--KeyWord Plus(R): JOIN

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VALDURIEZ P, 1987, V12, P218, ACM T DATABASE SYST

17/5/46 (Item 2 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

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05032961 Genuine Article#: TK446 Number of References: 27

**Title: QUERY EVALUATION - STRATEGIES AND OPTIMIZATIONS**

Author(s): TURTLE H; FLOOD J

Corporate Source: WEST PUBLISHING CO,610 OPPERMAN DR/EAGAN//MN/55123

Journal: INFORMATION PROCESSING & MANAGEMENT, 1995, V31, N6 (NOV), P831-850

ISSN: 0306-4573

Language: ENGLISH Document Type: ARTICLE

Geographic Location: USA

Subfile: SocSearch; SciSearch; CC ENGI--Current Contents, Engineering,  
Technology & Applied Sciences; CC SOCS--Current Contents, Social &  
Behavioral Sciences

Journal Subject Category: INFORMATION SCIENCE & LIBRARY SCIENCE; COMPUTER  
SCIENCE, INFORMATION SYSTEMS

Abstract: This paper discusses the two major query evaluation strategies  
used in large text retrieval systems and **analyzes** the **performance**  
of these **strategies**. We then discuss several optimization techniques  
that can be used to reduce evaluation costs and present simulation  
results to compare the performance of these optimization techniques  
when evaluating natural language queries with a collection of full text  
legal materials.

Identifiers--KeyWords Plus: **INFORMATION - RETRIEVAL ; INVERTED FILES ;  
RANKING**

Research Fronts: 94-8188 002 ( **INFORMATION - RETRIEVAL SYSTEMS;  
SEARCHING LARGE TEXT DATABASES ; GENETIC ALGORITHMS; VECTOR-SPACE  
MODEL; RANKING DOCUMENTS**)

Cited References:

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GRAEFE G, 1993, V25, P73, COMPUT SURV  
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HARMAN D, 1990, V41, P581, J AM SOC INFORM SCI  
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17/5/47 (Item 3 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
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02590911 Genuine Article#: LP018 Number of References: 346

**Title: QUERY EVALUATION TECHNIQUES FOR LARGE DATABASES**

Author(s): GRAEFE G

Corporate Source: PORTLAND STATE UNIV,DEPT COMP SCI,POB  
 751/PORTLAND//OR/97207

Journal: COMPUTING SURVEYS, 1993, V25, N2 (JUN), P73-170

ISSN: 0360-0300

Language: ENGLISH Document Type: REVIEW

Geographic Location: USA

Subfile: SciSearch; CC ENGI--Current Contents, Engineering, Technology &  
 Applied Sciences

Journal Subject Category: COMPUTER APPLICATIONS & CYBERNETICS

**Abstract:** **Database** management systems will continue to manage large data volumes. Thus, efficient algorithms for accessing and manipulating large sets and sequences will be required to provide acceptable performance. The advent of object-oriented and extensible **database** systems will not solve this problem. On the contrary, modern data models exacerbate the problem: In order to manipulate large sets of complex objects as efficiently as today's **database** systems manipulate simple **records**, **query** processing algorithms and software will become more complex, and a solid understanding of algorithm and architectural issues is essential for the designer of **database** management software.

This survey provides a foundation for the design and implementation of query execution facilities in new **database** management systems. It describes a wide array of practical query evaluation techniques for both relational and postrelational **database** systems, including iterative execution of complex query evaluation plans, the duality of sort- and hash-based set-matching algorithms, types of parallel query execution and their implementation, and special operators for emerging **database** application domains.

Descriptors--Author Keywords: ALGORITHMS ; **PERFORMANCE** ; COMPLEX QUERY **EVALUATION PLANS** ; DYNAMIC QUERY **EVALUATION PLANS** ; EXTENSIBLE **DATABASE SYSTEMS** ; ITERATORS ; OBJECT-ORIENTED **DATABASE SYSTEMS** ; OPERATOR MODEL OF PARALLELIZATION ; PARALLEL ALGORITHMS ; RELATIONAL **DATABASE SYSTEMS** ; SET-MATCHING ALGORITHMS ; SORT-HASH DUALITY

Identifiers--KeyWords Plus: RELATIONAL **DATABASES** ; CONCURRENCY-CONTROL; AGGREGATE FUNCTIONS; BUFFER MANAGEMENT; VALUED ATTRIBUTES; DATA LANGUAGE; DATA MODEL; SYSTEM-R; ALGEBRA; PERFORMANCE

Research Fronts: 91-2055 008 (SPATIAL **DATABASES** ; BINARY **SEARCH TREE**; **DATA ACCESS**; ADAPTIVE HASHING; LINEAR OCTREE; GEOGRAPHIC



VANDENBERG SL, 1991, P158, P ACM SIGMOD C NEW Y  
 WALTON CB, 1991, P537, P INT C VERY LARGE D  
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17/5/48 (Item 4 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
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00922168 Genuine Article#: FG009 Number of References: 14

Title: **SEMANTIC QUERY OPTIMIZATION IN DISTRIBUTED DATABASES**

Author(s): VANKUIJK HJA; PIJPERS FHE; APERS PMG

Corporate Source: UNIV TWENTE, POB 217/7500 AE ENSCHEDE//NETHERLANDS/

Journal: LECTURE NOTES IN COMPUTER SCIENCE, 1990, V468, P295-303

Language: ENGLISH Document Type: ARTICLE

Geographic Location: NETHERLANDS

Subfile: SciSearch

Journal Subject Category: COMPUTER APPLICATIONS & CYBERNETICS

Abstract: In this paper, semantic query optimization in distribution  
**database** systems is translated into a multilevel search process. The  
 overall search process is decomposed in two main stages: (1) guided by  
 the syntactic complexity of a query expression, search for an  
 appropriate optimization strategy, (2) given this strategy, transform  
 the query expression into an **efficient** distributed query **evaluation**  
**plan** . During the second stage, properties of the application being  
 modeled are used to attack a number of problems: detecting  
 inconsistent and redundant selection and join conditions, estimating  
 intermediate and final results, defining and using fragmentation  
 knowledge. An extensible knowledge-based architecture is described to  
 accommodate a variety of existing and future optimization techniques.

Research Fronts: 89-2412 001 (DISTRIBUTED **DATABASE** -MANAGEMENT SYSTEMS;  
 RELATIONAL **QUERIES** ; JOIN INDEX; TRANSACTION PROCESSING; INVERTED  
**FILE** )

25/5/3 (Item 3 from file: 8)  
DIALOG(R)File 8: Ei Compendex(R)  
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05309167 E.I. No: EIP99074709348

**Title:** Finding information on the World Wide Web: The retrieval effectiveness of search engines

**Author:** Gordon, Michael; Pathak, Praveen

**Corporate Source:** Univ of Michigan, Ann Arbor, MI, USA

**Source:** Information Processing and Management v 35 n 2 1999. p 141-180

**Publication Year:** 1999

**CODEN:** IPMADK **ISSN:** 0306-4573

**Language:** English

**Document Type:** JA; (Journal Article) **Treatment:** T; (Theoretical)

**Journal Announcement:** 9908W3

**Abstract:** Search engines are essential for finding information on the World Wide Web. We conducted a study to see how effective eight search engines are. Expert searchers sought information on the Web for users who had legitimate needs for information, and these users assessed the relevance of the information retrieved. We calculated traditional information retrieval measures of recall and precision at varying numbers of retrieved documents and used these as the bases for statistical comparisons of retrieval effectiveness among the eight search engines. We also calculated the likelihood document retrieved by one search engine was retrieved by other search engines as well. (Author abstract) 30 Refs.

**Descriptors:** World Wide Web; Online searching ; Data acquisition; Data reduction; Statistical methods

**Identifiers:** Search engines

**Classification Codes:**

903.3 (Information Retrieval & Use); 723.2 (Data Processing); 922.2 (Mathematical Statistics)

723 (Computer Software); 903 (Information Science); 922 (Statistical Methods)

72 (COMPUTERS & DATA PROCESSING); 90 (GENERAL ENGINEERING); 92 (ENGINEERING MATHEMATICS)

25/5/6 (Item 6 from file: 8)  
DIALOG(R)File 8: Ei Compendex(R)  
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04426401 E.I. No: EIP96063215669

**Title:** Computational of partial query results with an adaptive stratified sampling technique

**Author:** Ikeji, Augustine C.; Fotouhi, Farshad

**Corporate Source:** Eastern Michigan Univ, Ypsilanti, MI, USA

**Conference Title:** Proceedings of the 1995 ACM CIKM 4th International Conference on Information and Knowledge Management

**Conference Location:** Baltimore, MD, USA **Conference Date:** 19951128-19951202

**Sponsor:** ACM; SIGIR; SIGART

**E.I. Conference No.:** 44794

**Source:** International Conference on Information and Knowledge Management, Proceedings 1995. ACM, New York, NY, USA. p 145-149

**Publication Year:** 1995

**CODEN:** 002176

**Language:** English

**Document Type:** CA; (Conference Article) **Treatment:** T; (Theoretical)

**Journal Announcement:** 9608W2

**Abstract:** An algorithm is proposed for obtaining PQR (partial query results) for non-aggregate queries. The algorithm is based on stratification of the target relation and sampling of the strata over several stages. The experimental performance of the algorithm is presented and compared with other techniques for obtaining partial or entire query results. Results show that the proposed algorithm out-performs the other algorithms by finding more tuples that belong to the result set in the early stages of the query processing especially when the query

selectivity is high or the sample size is at least five percent of the population size. 14 Refs.

Descriptors: **Query** languages; Adaptive algorithms; Computation theory; **Performance** ; Data structures; **Statistics** ; **Database systems**

Identifiers: Partial **query** results; Adaptive stratified sampling; Stratification; Tuples; **Query** selectivity

Classification Codes:

723.3 (Database Systems); 723.1 (Computer Programming); 721.1 (Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory); 723.2 (Data Processing)

723 (Computer Software); 721 (Computer Circuits & Logic Elements)

72 (COMPUTERS & DATA PROCESSING)

25/5/7 (Item 7 from file: 8)

DIALOG(R)File 8:EI Compendex(R)

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04376099 E.I. No: EIP96043122800

**Title: Microcomputer-based database management system in a university library**

Author: Siddiqui, Moid A.

Corporate Source: King Fahd Univ of Petroleum & Minerals Library, Dhahran, Saudi Arabia

Source: Microcomputers for Information Management v 12 n 4 1995. p 287-300

Publication Year: 1995

CODEN: MIIMEW ISSN: 0742-2343

Language: English

Document Type: JA; (Journal Article) Treatment: A; (Applications); G; (General Review); M; (Management Aspects)

Journal Announcement: 9605W5

Abstract: This article describes a **database** management system (DBMS) developed in the Reference & Information Services of the King Fahd University of Petroleum & Minerals (KFUPM) Library in Dhahran, Saudi Arabia using an IBM PC AT. The objective of creating DBMS was to gather, manage, sort, and manipulate, **efficiently** and quickly, online **search statistics** . In addition, it reduces time spent on recordkeeping and maintaining statistical and financial data of online **searches** . (Author abstract) 17 Refs.

Descriptors: **Database** systems; Microcomputers; Libraries; Societies and institutions; Information services; Online **searching** ; Statistics; CD-ROM; Automation

Identifiers: Record keeping; CD-ROM **searching** ; Electronic library

Classification Codes:

903.4.1 (Libraries); 901.1.1 (Societies & Institutions)

723.3 (Database Systems); 722.4 (Digital Computers & Systems); 903.4 (Information Services); 901.1 (Engineering Professional Aspects); 722.1 (Data Storage, Equipment & Techniques)

723 (Computer Software); 722 (Computer Hardware); 903 (Information Science); 901 (Engineering Profession)

72 (COMPUTERS & DATA PROCESSING); 90 (GENERAL ENGINEERING)

25/5/16 (Item 16 from file: 8)

DIALOG(R)File 8:EI Compendex(R)

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00206585 E.I. Monthly No: EI72X012934

**Title: Criteria for optimum effectiveness of information retrieval systems.**

Author: HEAPS, H. S.

Corporate Source: Univ of Alberta, Edmonton

Source: Information and Control v 18 n 2 Mar 1971 p 156-67

Publication Year: 1971

CODEN: IFCNA ISSN: 0019-9958

Language: ENGLISH

Journal Announcement: 72X0

Abstract: Three measures of effectiveness of an information **retrieval** system are formulated in terms of a user's estimate of the relevance of items output. In each instance the type of question logic allowed is postulated without specification of certain parameters which denote the weights attached to the question terms. The parameters are then determined to maximise the effectiveness. Their values depend on certain **statistics** of the **data base**. The **search effectiveness** is then optimum for the permitted form of question, the measure of output relevance, and for **data bases** of similar statistics. The techniques used are analogous to those used to define a matched filter and a Wiener root-mean-square filter.

Descriptors: INFORMATION STORAGE AND **RETRIEVAL**

Classification Codes:

723 (Computer Software)

72 (COMPUTERS & DATA PROCESSING)

25/5/22 (Item 3 from file: 202)

DIALOG(R)File 202:Info. Sci. & Tech. Abs.

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3202018

**An investigation of the relative influences of database informativeness, query size and query term specificity on the effectiveness of Medline searching.**

Author(s): Heine, M H

Corporate Source: Univ. of Northumbria, Newcastle upon Tyne, England

Journal of Information Science vol. 21, no. 3, pages 173-185

Publication Date: 1995

ISSN: 1352-7460

Language: English

Document Type: Journal Article

Record Type: Abstract

Journal Announcement: 3200

An investigation of **search** effectiveness in Medline used regression analysis to compare the relative influences on **search** performance (characterized by Recall, Precision and the MZ-metric) of the three variables: **database** informativeness, and size and mean specificity of the **query**. (A " **query** " is defined as an unstructured set of **search** terms.) A reduction in random and/or systematic error was sought by means of three experimental devices: (i) error arising from the subjectivity of third-party relevance judges was minimized by using behaviorally-generated target sets of records; (ii) errors associated with the definitions of **queries** were avoided (or at least standardized) by using algorithmically derived **queries**, and (iii) error associated with uncontrolled variation in the logical structure of the **search** expression was minimized by using **search** expressions that had been optimized separately against each of the three performance criteria referred to. It was found that the dominant variable influencing **search** performances was the number of **query** terms.

**Database** informativeness had a **statistically** significant, but small, influence on **search performance** in almost all the data-sets, and this influence could be in either direction, depending on the data-set. The influence of term specificity was in general not statistically significant. Overall, the three predicting variables were able to explain up to 50% of the variation in **search** performance.

Descriptors: **Databases** ; Evaluation; Information **retrieval** ; MEDLINE

Classification Codes and Description: 5.11 ( **Searching** and **Retrieval** ) ;

6.06 (Life Sciences and Biomedicine

Main Heading: Information Processing and Control; Information Systems and Applications

25/5/25 (Item 1 from file: 65)

DIALOG(R)File 65:Inside Conferences

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03563519 INSIDE CONFERENCE ITEM ID: CN037530270

**A New Statistical Method for Performance Evaluation of Search Engines**

Li, L.; Shang, Y.

CONFERENCE: Tools with artificial intelligence-International conference;  
12th (Twelfth IEEE international conference on tools with artificial  
intelligence)

IEEE INTERNATIONAL CONFERENCE ON TOOLS WITH ARTIFICIAL INTELLIGENCE,  
2000; 12TH P: 208-215

IEEE Computer Society Press, 2000

ISSN: 1082-3409 ISBN: 076950910X; 0769509096; 0769509118

LANGUAGE: English DOCUMENT TYPE: Conference Preprinted selected papers

CONFERENCE SPONSOR: IEEE

CONFERENCE LOCATION: British Columbia, Canada 2000; Nov (200011) ( 200011)

BRITISH LIBRARY ITEM LOCATION: 4362.949970

NOTE:

Also known as ICTAI 2000. IEEE cat no 00CB7175

DESCRIPTORS: tools; IEEE; artificial intelligence; ICTAI

25/5/26 (Item 1 from file: 2)

DIALOG(R) File 2:INSPEC

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6889586 INSPEC Abstract Number: C2001-05-7250N-011

**Title: A new method for automatic performance comparison of search engines**

Author(s): Li, L.; Shang, Y.

Author Affiliation: Dept. of Comput. Eng. & Comput. Sci., Missouri Univ.,  
Columbia, MO, USA

Journal: World Wide Web vol.3, no.4 p.241-7

Publisher: Kluwer Academic Publishers,

Publication Date: 2000 Country of Publication: Netherlands

CODEN: WWWEFF ISSN: 1386-145X

SICI: 1386-145X(2000)3:4L:241:MAPC;1-J

Material Identity Number: H400-2001-001

Language: English Document Type: Journal Paper (JP)

Treatment: New Developments (N); Practical (P)

**Abstract:** Presents a new method for automatically comparing the performance, such as precision, of **search engines**. Based on **queries** randomly selected from a specific domain of interest, the method uses robots to automatically **query** the target **search engines**, evaluates the relevance of the returned links to the **query** either automatically based on the vector space model or manually, and then applies statistical measures, including the probability of win and the Friedman **statistic**, to compare the performance of the **search engines**. We show experimental results of using the new method on three **search engines**: AltaVista, Google and InfoSeek. The method arrived at the same performance comparison result in applying either the automatic relevance evaluation method or the manual method. In addition, our results show that the probability of win is a better metric than the Friedman statistic in performance comparison. The advantage of the new method is that it is fast, flexible and consistent, and can adapt to fast-changing **search engines**. (22 Refs)

Subfile: C

Descriptors: computer aided software engineering; probability; relevance feedback; **search engines**; software performance evaluation; statistics

Identifiers: automatic performance comparison; **search engines**; precision; randomly selected **queries**; robots; returned link relevance; vector space model; statistical measures; win probability; Friedman statistic; AltaVista; Google; InfoSeek; automatic relevance evaluation method; manual method

Class Codes: C7250N (Search engines); C1140Z (Other topics in statistics);  
; C7430 (Computer engineering); C6110B (Software engineering techniques);  
C6115 (Programming support)

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25/5/44 (Item 2 from file: 144)

DIALOG(R) File 144:Pascal  
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13557945 PASCAL No.: 98-0259746

**Natural language information retrieval : TREC-5 report**

STRZALKOWSKI T; GUTHRIE L; KARLGREN J; LEISTENSNIDER J; FANG LIN;  
PEREZ-CARBALLO J; STRASZHEIM T; JIN WANG; JON WILDING  
VOORHEES E M, ed; HARMAN E M, ed

GE Corporate Research & Development, United States; Lockheed Martin Corporation, United States; Department of Computer Science, New York University, United States; School of Communication, Information and Library Studies, Rutgers University, United States

Information Technology Laboratory, National Institute of Standards and Technology, Gaithersburg, MD 20899-0001, United States

National Institute of Standards and Technology (NIST), Gaithersburg, MD, United States.; Defense Advanced Research Projects Agency (DARPA), Arlington, VA, United States.

TREC-5 Text Retrieval Conference, 5 (Gaithersburg, MD USA) 1996-11-20

Journal: NIST special publication, 1997 (500238) 291-313

ISSN: 1048-776X Availability: INIST-14185; 354000078729490240

No. of Refs.: 11 ref.

Document Type: P (Serial); C (Conference Proceedings) ; A (Analytic)

Country of Publication: United States

Language: English

In this paper we report on the joint GE/Lockheed Martin/Rutgers/NYU natural language information **retrieval** project as related to the 5th Text **Retrieval** Conference (TREC-5). The main thrust of this project is to use natural language processing techniques to enhance the effectiveness of full-text document **retrieval**. Since our first TREC entry in 1992 (as NYU team) the basic premise of our research was to demonstrate that robust if relatively shallow NLP can help to derive a better representation issues and towards **query** development problems. While our TREC-5 system still performs extensive text processing in order to extract phrasal and other indexing terms, our main focus this year was on **query** construction using words, sentences, and entire passages to expand initial topic specifications in an attempt to cover their various angles, aspects and contexts. Based on our earlier TREC results indicating that NLP is more effective when long, descriptive **queries** are used, we allowed for liberal expansion with long passage from related documents imported verbatim into the **queries**. This method appears to have produced a dramatic improvement in the **performance** of two different statistical **search engines** that we tested (Cornell's SMART and NIST's Prize) boosting the average precision by at least 40%. The overall architecture of TREC-5 system has also changed in a number of ways from TREC-4. The most notable new feature is the stream architecture in which several independent, parallel indexes are built for a given collection, each index reflecting a different representation strategy for text documents. Stream indexes are built using a mixture of different indexing approaches, term extracting, and weighting strategies. We used both SMART and Prize base indexing engines, and selected optimal term weighting strategies for each stream, based on a training collection of approximately 500 MBytes. The final results are produced by a merging procedure that combines ranked list of documents obtained by **searching** all stream indexes with appropriately preprocessed **queries**. This allows for an effective combination of alternative **retrieval** and filtering methods, creating into a meta- **search** where the contribution of each stream can be optimized through training

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S4	34616	S1(10N)STATISTIC?
S5	1842049	DATABASE? ? OR DATA()BASE? ? OR REPOSITOR??? OR SEARCH()EN- GINE? ?
S6	253	S3(S)S5
S7	37	S3(S)S5(S)(SEARCH??? OR RETRIEV? OR QUER????)
S8	26	RD (unique items)
S9	21	S8 NOT PD>20001019
S10	1514	S4(S)S5
S11	196	S10(S)(SEARCH??? OR RETRIEV? OR QUER????)
S12	1610	S2(S)STATISTIC?
S13	125	S2(S)STATISTIC?(S)(S5 OR SEARCH??? OR RETRIEV? OR QUER????)
S14	95	RD (unique items)
S15	398	S2(10N)STATISTIC?
S16	15	S15(S)(S5 OR SEARCH??? OR RETRIEV? OR QUER????)
S17	12	RD (unique items)
S18	436772	S1(5N)(RANK??? OR SORT??? OR PRIORITIZ? OR PRIORITIS? OR O- RGANI? OR ARRANG? OR RESORT? OR RERANK??? OR REPRIORITIZ? OR - REPRIORITIS? OR REQUEU? OR REORDER? OR RESEQUENC? OR REARRANG? OR REORGANI? OR RESHUFFL? OR ORDER???)
S19	317	S12 AND S18
S20	26	S13 AND S18
S21	19	RD (unique items)

9/9/21 (Item 3 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
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00603113 92-18216

**Oracle Preps Distributed DBMS Pack**

O'Brien, Timothy

Network World v9n10 PP: 1, 6 Mar 9, 1992 ISSN: 0887-7661 JRNL CODE:  
NWW

DOC TYPE: Journal article LANGUAGE: English LENGTH: 2 Pages  
WORD COUNT: 736

**ABSTRACT:** Oracle Corp. is preparing to introduce an enhanced version of its relational database management system (DBMS). Major improvements are slated for Version 7 in the areas of performance, data integrity, query optimization, and security that provide true distributed database capabilities. One key new feature of Version 7 is a 2-phase commit function used to simultaneously update multiple databases. The 2-phase commit is essential for maintaining data integrity across an enterprise net. For users that do not need full online distributed capabilities, Version 7 will provide a snapshot function that allows users to periodically replicate copies of a database and distribute them to remote sites. Version 7 will support location transparency, which means that Standard Query Language (SQL) statements and applications will not have to be rewritten if data is moved. Version 7 also utilizes a feature called Shared SQL, which allows many users to execute the same set of SQL statements, as well as a multithreaded server architecture, which improves support for multiple clients.

**TEXT:** Redwood Shores, Calif.--Oracle Corp. is readying for the long-awaited introduction of an enhanced version of its relational DBMS that offers broad new distributed data management capabilities.

Previous versions of the database management system have supported data sharing across a net. But internal sources at Oracle last week detailed major improvements slated for Version 7 in the areas of performance, data integrity, query optimization and security that provide true distributed database capabilities.

Company officials said privately that the unveiling of the heralded Version 7 had been pegged for April 27, but acknowledged the announcement could slip to June. Analysts said the product will bring Oracle in line with competitors such as Sybase, Inc. and Ingres Corp., an ASK company.

"Oracle has been behind its competitors and needs this release to keep up and deliver on past promises," said Aaron Zornes, vice-president of application development strategies with the Burlingame, Calif., office of the META Group consultancy.

Version 7 has experienced a number of delays, which Oracle officials claim have resulted from additional testing and quality assurance procedures.

"What will be coming out soon for beta users is going to be a lot more solid than in the past," said an Oracle official.

With an expanded beta test program just getting under way, some company insiders are not expecting Version 7 to ship until at least the third quarter.

**NEW FEATURES**

One key new feature of Version 7 is a two-phase commit function used to simultaneously update multiple databases. The two-phase commit only allows updates when all databases are ready to receive them and is essential for maintaining data integrity across an enterprise net.

With the two-phase commit, distributed databases can be viewed by users and applications as a single, logical database and transparently handle



queries, updates and table replication from anywhere in the network.

To use this function, application programs invoke a command to "commit" the transactions and do not need to know the physical location of the data, recovery mechanisms or other aspects of database coordination.

According to the Oracle officials, two-phase commit also allows the company to coexist in a distributed environment with other non-Oracle databases supported by transaction processing monitors, such as IBM's CICS and AT&T's Tuxedo.

For users that do not need full on-line distributed capabilities, Version 7 will provide a "snapshot" function that allows users to periodically replicate copies of a database and distribute them to remote sites. That periodic database refreshment can reduce network traffic.

Version 7 also supports location transparency, which means that SQL statements and applications will not have to be rewritten if data is moved. That transparency is achieved through what Oracle calls database links, which are named objects that provide a path to a remote database.

The product will also support ANSI-compliant "declarative" database integrity rules for both entity and referential integrity. Therefore, users will be able to define the rules by which certain database relationships are enforced in the server without any coding, thereby reducing application development time.

Version 7 also includes the ability to use Oracle's PL/SQL language to define stored procedures and triggers, mechanisms that invoke certain database commands when preestablished conditions have been met.

In addition to providing enhanced data integrity, stored procedures and triggers improve performance in a distributed environment because they can reduce the number of commands transmitted over the network.

According to analysts, one area in which Oracle could improve has been its query optimizer, which ensures that database operations in a network are being coordinated in the most efficient way.

Oracle said this tool was completely overhauled in Version 7. The company will offer a so-called cost-based optimizer and a resource limiter capability to boost performance and improve control over system resources during **query** execution. The cost-based optimizer chooses the most **efficient query execution plan** after **analyzing database** statistics, such as the size of rows and columns.

"Oracle needed to provide a strong query optimizer," said Shaku Atre, president of Atre Consulting in Rye, N.Y. "Now more than ever, you need an efficient way to know where the data is and how to get it."

Version 7 also utilizes a feature called Shared SQL, which allows many users to execute the same set of SQL statements, as well as a multithreaded server architecture, which improves support for multiple clients.

These two features reduce memory utilization, shorten application start-up time and decrease the number of operating system processes required as overhead.

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9/3,K/1 (Item 1 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

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02092477 SUPPLIER NUMBER: 19535410 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**An overview of JDBC. (SunSoft's Java Database Connectivity API) (includes related article on technical notes on Java and JDBC) (Product Support)**

Lazer, Bill

Network, v12, n7, p95(4)

July, 1997

LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 3876 LINE COUNT: 00317

... statements already stored in the database are to be executed.

Both Statement and PreparedStatement are used when SQL statements are to be presented to the **database** for execution. When SQL statements are presented to the **database**, the **database** creates numerous varying plans by which the new request can be satisfied. (SQL, after all, is a logical language that presents a variety of ways to **retrieve** the desired data from the underlying physical storage.) After the plans are created, the **database**'s optimizer **evaluates** them, selecting the most **efficient plan** and compiling it into a binary format. A handle to this binary version is returned to the application. The essential difference between the Statement and...

9/3,K/2 (Item 2 from file: 275)

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01499063 SUPPLIER NUMBER: 11953115 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Letters. (Letter to the Editor)**

Reis, Richard; O'Gara, John; Howard, Joy; Bolza, William F.; Vosburgh, Brian J.; Kanten, Naomi; Tyrrell, Susan; Whetzel, Roger D.

PC Week, v9, n8, p70(3)

Feb 24, 1992

DOCUMENT TYPE: Letter to the Editor ISSN: 0740-1604 LANGUAGE:

ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 2081 LINE COUNT: 00167

... of experienced on-line searchers, organizations can easily squander valuable resources trying to use commercial databases, often with disappointing results.

Librarians can help determine which **databases** will best meet an organization's needs, implement **efficient retrieval strategies** and **evaluate** their effectiveness. They can serve as intermediaries, performing **searches** on behalf of clients who do not have the time or inclination to access on-line systems themselves, or they can provide valuable training and support to those who do. They can set up **database searches** that will automatically **retrieve** the information on critical issues on a weekly or daily basis, and work with information-systems staff to disseminate this information to the clients' workstations...

9/3,K/3 (Item 3 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

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01484427 SUPPLIER NUMBER: 13885545

**Intelligent database caching through the use of page-answers and page-traces. (Technical)**

Kamel, Nabil; King, Roger

ACM Transactions on Database Systems, v17, n4, p601(46)

Dec, 1992

DOCUMENT TYPE: Technical ISSN: 0362-5915 LANGUAGE: ENGLISH

RECORD TYPE: ABSTRACT

ABSTRACT: A new technique is presented that improves use of main memory

systems; it is based on prestoring a number of **query** answers in main memory that are evaluated out of a single memory page. The concept of page-answers and page-traces is described, and their properties are examined. A **query** model is used that supports selection, projection, join, recursive **queries**, and arbitrary combinations. How to apply the approach under update traffic is shown, which is particularly useful for managing the main memories of an important class of applications, including the **evaluation** of triggers and alerters, **performance** improvement or **rule**-based systems, integrity constraint **checking**, and materialized views. This is a new type of intelligent **database** caching in which cache elements are derived data, so they overlap arbitrarily and do not have a fixed length.

9/3,K/4 (Item 1 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)  
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01592527 Supplier Number: 48173618 (USE FORMAT 7 FOR FULLTEXT)

**SISCOM, Inc. Announces First Quarter Results for Fiscal 1998**

PR Newswire, p1211LATH012

Dec 11, 1997

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 726

... digital video hardware, CDSS unites large quantities of statistical and video information into a useful coaching tool. An interface with the NBA's courtside logging **database** allows coaches to display pertinent game statistics in a variety of customized, easy-to-use graphical formats. By applying specific "filter criteria" to their **queries** -- such as period, point spread and player matchups -- coaches quickly gain the insight they need to **assess** player **performance**, design **strategies**, **analyze** opponents and set goals.

CDSS adds value to industry-standard digital video technologies from Sony and FAST Electronic U.S., giving NBA teams the powerful...

9/3,K/5 (Item 1 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

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04566104 Supplier Number: 57779325 (USE FORMAT 7 FOR FULLTEXT)

**EU/UN: WORLD WATER DAY AND PROPOSAL FOR A SOCIAL CHARTER ON WATER. (World Commission on Water)**

Europe Environment, pNA

March 30, 1999

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 4737

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...a political agreement on these two texts on December 21, 1998 (see Europe Environments No 536 and 540). The first of these proposals provides for **assessing** the **effectiveness** of the EU **strategy** to limit CO2 emissions from motor vehicles, and improve fuel-saving. Under this draft Decision establishing a programme for monitoring average carbon dioxide emissions from...using the Internet as a major mechanism for information sharing and dissemination...XX:The two Agencies have joined forces in a series of fields, establishing **data bases** and other information tools in a coherent and structured fashion, a process that required both parties to resolve problems linked to terminology. They have undertaken...was initially developed for the EEA by Italy's Consiglio Nazionale delle Ricerche (CNR) and Germany's Umwelt-Bundesamt (UBA) as a reference, indexing and **retrieval** tool for the EEA catalogue of data sources and other **data bases**, and has since been adopted by the US-EPA as the reference thesaurus for its Terminology Reference System (TRS). The

American agency participated directly in...emerging information technologies (development of intelligent software agents operating over the Internet). It is hoped the EDEN project will support a dynamic environment in which **data bases** can be added or removed without affecting the basic behaviour of the system. The project will be developed from a small initial group of **data bases** but will provide for the incorporation of additional **databases** : GEMET will serve as a reference for mapping activities...MM:ENVE..II:0542..DD:19990330..AA:414..TT:STILL NO EVIDENCE OF BSE TRANSMISSION THROUGH...

9/3,K/6 (Item 2 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

(c) 2003 The Gale Group. All rts. reserv.

04020110 Supplier Number: 53246580 (USE FORMAT 7 FOR FULLTEXT)

**-BAAN COMPANY: Baan announces Euro Scan, a software consulting package to assist with transition to euro.**

M2 Presswire, pNA

Nov 20, 1998

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 769

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...Portugal and Spain. Every enterprise system is a unique combination of hardware, system resources, standard components and customised software. This can make it difficult to **analyse** and create an **effective plan** for euro-compliance. But Baan Euro Scan, based on technology from BaanWeb partner Baan Business Optimization, effectively provides customers with their own software 'euro consultant...

...migration issues into perspective. Baan Euro Scan collects relevant data about a company's enterprise IT infrastructure. It analyses information on hardware platform, operating system, **database**, CPU and disk capacity, to advise on issues such as the disk space required for migration to the euro. Baan Euro Scan also **retrieves** information on installed software versions, customised components, porting sets and VRC structure: this information is used to establish how many euro-related transactions run on...

9/3,K/7 (Item 3 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

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04009165 Supplier Number: 53183936 (USE FORMAT 7 FOR FULLTEXT)

**-ORACLE: Oracle announces industry's only comprehensive data warehousing solution.**

M2 Presswire, pNA

Nov 4, 1998

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 1828

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...solution consisting of a solid technology foundation and analytic applications. This end-to-end approach enables fast implementations and a quicker return on investment." Pioneering **Database** Technologies: Oracle8i technology makes data warehousing faster and simpler with more data and more users. "Summary management" presummarises data for faster results, while "hash partitioning" spreads data across **database** partitions for faster access. "Transportable table spaces" moves large volumes of data directly between **databases**, without importing or exporting. "Functional indexes" allow the indexing of derived or calculated data without actually storing the derived data. Also new: Resource management, improved...  
...any question. Web Business Intelligence includes newly integrated

releases of Oracle Reports, Oracle's enterprise reporting tool; Oracle Discoverer, Oracle's award-winning ad hoc **query** and analysis tool; and Oracle Express , Oracle's industry-leading enterprise OLAP engine. Metadata Strategy: Metadata, or the information about enterprise data, has emerged as...

...and, now, Sun Solaris. DMS2 includes Data Mart Designer, which models data marts; Data Mart Builder, which manages implementations; Discoverer, for end-user ad hoc **query** and analysis; Oracle Web Application Server, to drive Web-based data surfing; and Oracle Reports and Reports Server, for dynamic Web reporting. Also included: Oracle8 Enterprise Edition, the world's most trusted **database** . In addition to Oracle's industry leading technology foundation, Oracle provides a set of analytic applications that present a precise, ongoing picture of where you...and more. Oracle Financial Analyzer 6.2 delivers ready-to-go tools that centralise management data and help financial executives track key indicators, control costs, **analyse performance** , **evaluate** opportunities, **plan** future directions, and more. Both products fully leverage data in Oracle Applications and other supported ERP suites. Oracle makes it easy for customers to take...

9/3,K/8 (Item 4 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

(c) 2003 The Gale Group. All rts. reserv.

03913832 Supplier Number: 50125452 (USE FORMAT 7 FOR FULLTEXT)

**-MICRO COMPUTER SYSTEMS: Customer service of excellence - e-mail flood under control**

M2 Presswire, pN/A

July 2, 1998

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 790

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...the same time the program automatically sends a return receipt with customizable text to the originator of the message quoting the transaction ID for possible **query** . Comprehensive set-up and configuration tools as well as flexible filter options ensure customised configuration of the software to perform the fully automated routing of...

...supervisors to continuously monitor the e-mail load and the company's response performance. Statistics cover pre-definable time periods for precise analysis and accurate **measurement** of each operator's individual **performance** . Further **filter** options allow supervisors to set priorities to specific e-mails for immediate action. With "CalypsoGram", a tool for sending condensed, telegram style e-mail messages...

...accounts targeted at the professional e-mail user as well as Calypso Autolink, a 100% Pure Java certified high-end application for automatic despatch of **database** information in form of e-mail messages or FTP files. Since its foundation in 1980 US-based Micro Computer Systems, Inc. develops and markets a...

9/3,K/9 (Item 5 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

(c) 2003 The Gale Group. All rts. reserv.

02792115 Supplier Number: 45664537 (USE FORMAT 7 FOR FULLTEXT)

**PLATINUM TECHNOLOGY RELEASES JAPANESE TRANSLATED VERSIONS OF PERFORMANCE MANAGEMENT TOOLS**

M2 Presswire, pN/A

July 12, 1995

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 686

... The Products The three translated products perform a number of performance management tasks: \* PLATINUM Detector is an application performance analysis tools for DB2 for MVS **databases** . It identifies the applications and Structured **Query** Language (SQL) statements that are most heavily used, and consume most of the resources, in a DB2 system. This helps DBAs determine which applications and SQL statements need to be "tuned" (modified) to improve system **performance** .

PLATINUM **Plan Analyser** (PPA) is an application performance analysis, monitoring, and management tools for DB2 for MVS **databases** . It analyses DB2 plans (control structures used to process SQL statements), DBRMs ( **database** request modules - data set members containing information about SQL statements), packages (a single DBRM, ready for processing), and individual SQL statements. PPA identifies the path...

9/3,K/10 (Item 6 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

(c) 2003 The Gale Group. All rts. reserv.

01862204 Supplier Number: 43197861 (USE FORMAT 7 FOR FULLTEXT)

**SILVERPLATTER OFFERS TRAINING PROGRAM**

Multimedia Publisher, v3, n8, pN/A

August, 1992

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 207

... Boston Area

October 29 - Chicago, Online Conference

Other dates and locations will be announced later this year. Topics covered in the training program include: effective **searching** of **databases** using PC SPIRS use of boolean operators a thesauri **searches** a tips for faster and more **effective searching search strategy** formulation and **analysis** 9 **database** structure.

According to Gerry Hurley, coordinator of the Training Program at SilverPlatter, "CD-ROM provides users with access to enormous amounts of information. The training...

9/3,K/11 (Item 7 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

(c) 2003 The Gale Group. All rts. reserv.

01455067 Supplier Number: 41968330 (USE FORMAT 7 FOR FULLTEXT)

**TRENDS IN CORPORATE DATABASE APPLICATIONS--PART III**

Financial Technology Insight, pN/A

April, 1991

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 2767

... potential performance gain for an efficiently formulated query may be an order of magnitude or more.

If users had a full understanding of the underlying **database** architecture, then they would be able to ensure that their **queries** were always formulated for efficient processing. This is an unrealistic expectation, of course, and in any case runs counter to the philosophy of making the use of IT more transparent. It has proved possible, however to devise software which can optimize **queries** automatically. Although this itself adds to the processing load, the performance gains may still be substantial. In fact, it is usually impractical to find the strictly optimal **query** processing strategy, as to do this would probably use more processing time than it could possibly save. Instead, **query** optimizers are designed to produced 'reasonably' **efficient** processing **strategies** .

It is difficult to **assess** the benefits of new technologies without reliable means of measuring performance. A number of standard **database**

benchmarks have been developed for this purpose, and to evaluate system requirements. Unfortunately, they do not reproduce the kind of transaction load more typical of new applications, and so are no longer the reliable guides. Knowledge-based decision support systems may involve transactions over sets of **database** records, rather than individual ones. In some cases, these sets may be extremely large, containing perhaps tens, or hundreds of thousands, of records. New benchmarks...

9/3,K/12 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
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05803350 Supplier Number: 50295634 (USE FORMAT 7 FOR FULLTEXT)

**The Music Man**

Rasmusson, Erika  
Sales & Marketing Management, v150, p22  
Sept, 1998  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 1653

... the summer. Arista (which does not have a stake in the actual Fair itself) has high hopes that the Lilith Fair CD will be equally **successful**, and business **strategy** and **analysis** have played a large role in marketing the CD. In addition to promoting the album through standard print buys and point of sale materials, the...

...Martin's job 'is to be the point person and make sure it all fits together.' But it was his idea to tap Ticketmaster's **database** and send direct mail pieces to Fair ticket buyers from last year; and charge-by-phone ticket buyers from this year. Additional elements of the...

...release last April; offering the CD as a give-away for radio promotions of Lilith Fair; and tying in the album with 14 nationwide talent **searches** for the Fair. 'We look at Lilith Fair as an opportunity to fuel record sales,' Martin says simply.

With 500,000 copies sold, Martin considers...

9/3,K/13 (Item 1 from file: 160)  
DIALOG(R)File 160:Gale Group PROMT(R)  
(c) 1999 The Gale Group. All rts. reserv.

01046729

**Manager search goes on-line.**

Pensions & Investment Age June 11, 1984 p. 481

Online **retrieval** systems begin to simplify pension funds' choice of investment managers. Selecting the right manager has been difficult and time consuming for funds, since the process...

... and processing detailed questionnaires and many personal interviews. However, plans are increasingly tracking and screening managers' performances via computers, and some firms are making their **databases** available to others. Berg Fiduciary Consultants will begin selling its Plan Sponsor Network (PSN), a joint venture of P Berg, pres, and B Effron, pres  
...

...to coordinate input from plan sponsors and investment managers to ensure that the system meets all needs PSN's goal is to create a standardized **database** compatible with various computer models that could be used by other consultants as well as plan sponsors. The systems functions will include financial forecasting, asset modeling, asset allocation, screening and **evaluation**, investment portfolio **performance evaluation**, investment **strategy** development and **evaluation** of investment alternatives. Many other details are given. ...

9/3,K/14 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2003 The Gale Group. All rts. reserv.

12347400 SUPPLIER NUMBER: 61755299 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**A Survey of Internet Searches and Their Results.**  
Barnett, Andy  
Reference & User Services Quarterly, 39, 2, 177  
Winter, 1999  
ISSN: 1094-9054 LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 3295 LINE COUNT: 00259

TEXT:

...hundred Internet searches using Magellan Voyager, and then reentered the searches in Magellan and Hotbot. We categorized the searches by the search operators used, including **search engine** math, phrase **searches**, Boolean logic, natural word **searches**, and Web address **searches**. Here we **assess** the relative **success** of the various **strategies**, as well as the implications for user education.

9/3,K/15 (Item 2 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2003 The Gale Group. All rts. reserv.

10571692 SUPPLIER NUMBER: 53132115 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**How Well Do Physicians Use Electronic Information Retrieval Systems?**  
Hersh, W.; Hickam, D.H.  
JAMA, The Journal of the American Medical Association, 1347(1)  
Oct 21, 1998  
ISSN: 0098-7484 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 6377 LINE COUNT: 00571

ABSTRACT: Health sciences librarians are generally more effective than physicians at retrieving information from electronic medical **databases**. Researchers examined studies **assessing** the **effectiveness** of online **search strategies** in obtaining medical articles relevant to the user's interest. Using **databases** such as MEDLINE, Library and Information Science (LISA) bibliographies, and other sources, librarians obtained articles 58% relevant to their topic of interest, compared to 49% relevance for material obtained in physician-initiated **searches**. **Database searches** often returned no articles, or irrelevant articles, frequently resulting from the incorrect use of subheadings when **searching** by index terms. Keyword and free-text **searching** was generally effective and preferred by end-users.

9/3,K/16 (Item 3 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2003 The Gale Group. All rts. reserv.

10431616 SUPPLIER NUMBER: 21074322 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**From the Field.**  
Rasmusson, Erika  
Sales & Marketing Management, v150, n9, p22  
Sep, 1998  
ISSN: 0163-7517 LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 1769 LINE COUNT: 00136

... the summer. Arista (which does not have a stake in the actual Fair itself) has high hopes that the Lilith Fair CD will be equally **successful**, and business **strategy** and **analysis** have played a large role in marketing the CD. in addition to promoting the album through standard print buys and point of sale materials, the...

...Martin's job "is to be the point person and make sure it all fits together." But it was his idea to tap Ticketmaster's **database** and send



direct mail pieces to Fair ticket buyers from last year; and charge-by-phone ticket buyers from this year. Additional elements of the...

...release last April; offering the CD as a give-away for radio promotions of Lilith Fair; and tying in the album with 14 nationwide talent **searches** for the Fair. "We look at Lilith Fair as an opportunity to fuel record sales," Martin says simply.

With 500,000 copies sold, Martin considers...

9/3,K/17 (Item 4 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2003 The Gale Group. All rts. reserv.

09881274 SUPPLIER NUMBER: 20009641 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Siscom, Inc. to Provide Coaching Decision Support System To Eight National Basketball Association Teams During 1997-98 Season**  
PR Newswire, p1124LAM024  
Nov 24, 1997  
LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 848 LINE COUNT: 00076

... digital video hardware, CDSS unites large quantities of statistical and video information into a useful coaching tool. An interface with the NBA's courtside logging **database** allows coaches to display pertinent game statistics in a variety of customized, easy-to-use graphical formats. By applying specific "filter criteria" to their **queries** -- such as period, point spread and player matchups -- coaches quickly gain the insight they need to **assess** player **performance**, design **strategies**, **analyze** opponents and set goals.

CDSS adds value to industry-standard digital video technologies from Sony and FAST Electronic U.S., giving teams the powerful ability...

9/3,K/18 (Item 5 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2003 The Gale Group. All rts. reserv.

07587140 SUPPLIER NUMBER: 15926245 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**The effectiveness of four interventions for the prevention of low back pain.**  
Lahad, Amnon; Malter, Alex D.; Berg, Alfred O.; Deyo, Richard A.  
JAMA, The Journal of the American Medical Association, v272, n16, p1286(6)  
Oct 26, 1994  
ISSN: 0098-7484 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 6575 LINE COUNT: 00529

AUTHOR ABSTRACT: Objective.--Low back pain affects 60% to 80% of US adults at some time during their lives. This review **evaluates** the **effectiveness** of four **strategies** to prevent low back pain for asymptomatic individuals: back and aerobic exercises, education, mechanical supports (corsets), and risk factor modification. Data Sources.--The MEDLINE **database** was **searched** for all relevant articles published in English between 1966 and 1993. Bibliographies of identified articles were **searched** to ensure that all pertinent articles had been gathered and back pain specialists reviewed our final bibliography for completeness. Study Selection and Data Extraction.--A...

9/3,K/19 (Item 1 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)  
(c) 2003 ProQuest Info&Learning. All rts. reserv.

02495036 117543622  
**The manager's guide to internal control: diary of a control freak**  
Pickett, K H Spencer  
Management Decision v37n2 PP: 93 1999  
ISSN: 0025-1747 JRNL CODE: MGD

WORD COUNT: 90354

...TEXT: a stroke by the time he got back to England.

Jack asked; "Why do you feel compliance teams are the answer?"

"Well, control is about **checking** up on past **performance** and **assessing** whether standards are being adhered to. Managers are more interested in coaching staff for future performance and encouraging development. Therefore, let the auditors do this...is important. A diagram will provide an example of this(Figure 36):"

"This model suggests that we need general information that is held in corporate **databases** . It includes policy documents, strategic intentions, performance targets, company trends and so on. If we have to make 20 per cent budget cuts in our...

9/3,K/20 (Item 2 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
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00630839 92-45779

**Binding Propagation Beyond the Reach of Rule/Goal Graphs**

Han, Jiawei

Information Processing Letters v42n5 PP: 263-268 Jul 3, 1992

ISSN: 0020-0190 JRNL CODE: IPL

ABSTRACT: Rule/goal graphs have been popularly used in the analysis of binding propagation in deductive **databases** . Some interesting techniques, such as the Magic rule rewriting and its variations, have been developed on such an analysis. Binding propagation in linear recursions is...

... a linear recursion into a set of highly regular rewritten rules that capture the binding propagated in both forward and backward directions among different expansions. **Efficient query evaluation rules** can be generated based on the analysis of the rewritten rules. ...

9/3,K/21 (Item 3 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2003 ProQuest Info&Learning. All rts. reserv.

00603113 92-18216

**Oracle Preps Distributed DBMS Pack**

O'Brien, Timothy

Network World v9n10 PP: 1, 6 Mar 9, 1992

ISSN: 0887-7661 JRNL CODE: NWW

WORD COUNT: 736

...TEXT: The company will offer a so-called cost-based optimizer and a resource limiter capability to boost performance and improve control over system resources during **query** execution. The cost-based optimizer chooses the most **efficient query** execution **plan** after **analyzing database** statistics, such as the size of rows and columns.

17/3,K/1 (Item 1 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

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02513425 SUPPLIER NUMBER: 75644894 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**E-Global Library: The Academic Campus Library Meets the**

**Internet. (Technology Information)**

Heilig, Jean M.

Searcher, 9, 6, 34

June, 2001

ISSN: 1070-4795

LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 5496

LINE COUNT: 00478

... Decimal Classification System and the Library of Congress Classification System.

The Internet 101 tutorial instructs students on how to do research on the Internet: developing **effective search strategies**; locating business, government, and **statistical** information; finding images; the hidden Internet; evaluating Internet information; and citing Internet sources. Business 101 teaches students how to perform business research on the Internet...

17/3,K/2 (Item 2 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

(c) 2003 The Gale Group. All rts. reserv.

01608115 SUPPLIER NUMBER: 14037151 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Business community primes for parallel; hardware, software suppliers pushing parallel database as commercial entree. (database management systems for parallel processing architectures)**

Francett, Barbara

Software Magazine, v13, n10, p63(6)

July, 1993

ISSN: 0897-8085

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 3772

LINE COUNT: 00310

... for delivery this summer, when Windows NT becomes available. Exabyte plans to use the system to gather test data for all its products and perform **statistical** processing to determine trends and realtime **performance** variances. "We **plan** to run the same **query** against both the existing and new WinServer system and compare the results," Dillman said.

This solution should improve decision support performance and system responsiveness, Dillman...

17/3,K/3 (Item 1 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

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04164299 Supplier Number: 54557234 (USE FORMAT 7 FOR FULLTEXT)

**News in Brief.**

Management Consultant International, pNA

April 15, 1999

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 977

A **DATABASE** for benchmarking 82 of the UK's leading management consultancies has been launched, offering **statistics** on **performance** on 182 issues. **Policy** Publications allows companies to answer a detailed questionnaire, which will then set them against the industry average in criteria including success of new pitches, a...

17/3,K/4 (Item 2 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

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01175289 Supplier Number: 41043882 (USE FORMAT 7 FOR FULLTEXT)

**Aregon raises the heat with TS-STAR ...**

Dealing With Technology, v2, n2, pN/A

Dec, 1989

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Trade

Word Count: 999

... the time series data.

Anumber of differenttypes of strategy lines are available including data selection (used to select the data items requiredfrom the time series **database** ), parameters (which are used during the strategydesignand evaluation stages to specify items such as moving average filter values, the size of atrade to be executed etc.), calculations (that perform the strategy), tradeanalysis (theoutputof the strategy as a decision to trade) and **statistics** (which are used in theevaluation process to determine the likely **performance** of the **strategy** in real-life operation).

TS-STAR provides a wide range of arithmetic, logical and specialist statistical functions which may be incorporated into calculation lines. Organisations...

**17/3,K/5 (Item 1 from file: 16)**

DIALOG(R)File 16:Gale Group PROMT(R)

(c) 2003 The Gale Group. All rts. reserv.

04807384 Supplier Number: 47073357

**Regional Bank Index - Industry Report**

Investext, pl-2

Jan 28, 1997

Language: English Record Type: Abstract

Document Type: Magazine/Journal; Trade

**ABSTRACT:**

...it will acquire First USA for \$7.3 billion. Strategically, the deal will enhance Banc One's credit-card operation, which is important to a **successful** consumer banking **strategy**.x0D Tables in report: Comparative **Statistics** 1994-98; MSRB Fundamentals/Measures 1992-98x0D The INVESTEXT **database** offers the full text of this report online (RN=2529017). To order printed copies, CALL (800)662-7878, (212)484-4700 US, (071)815-3860...

**17/3,K/6 (Item 1 from file: 15)**

DIALOG(R)File 15:ABI/Inform(R)

(c) 2003 ProQuest Info&Learning. All rts. reserv.

02392766 140744571

**Youth unemployment outflow rates and labor market programs: Australian evidence**

Leeves, Gareth

Contemporary Economic Policy v20n3 PP: 301-315 Jul 2002

ISSN: 1074-3529 JRNL CODE: CPI

WORD COUNT: 6946

...TEXT: 1993, 1995), Boeri (1994), Van der Linden et al. (1995), Boeri and Burda (1996), Gora et al. (1996), among others, which asserts that to be **successful** a largescale **policy** measure should be reflected in a **statistically** significant positive correlation between such a measure and outflows from unemployment to employment. Some studies have acknowledged the importance of duration of unemployment by including stocks of long-term unemployed as an explanatory variable to capture the state dependency of **search** effectiveness. Van der Linden et al. (1995) used stocks of unemployment disaggregated by duration in the construction of their dependent variables. None of the previous...

**17/3,K/7 (Item 2 from file: 15)**

DIALOG(R)File 15:ABI/Inform(R)  
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01804872 04-55863

**Mining fool's gold**

McQueen, Grant; Thorley, Steven  
Financial Analysts Journal v55n2 PP: 61-72 Mar/Apr 1999  
ISSN: 0015-198X JRNL CODE: FIA  
WORD COUNT: 8200

...TEXT: Higgins or Knowles and Petty (which we call intergenerational mining).<sup>8</sup> The inability to assess the significance of a trading rule found after extensive collective **searching** has been dubbed the "file drawer problem" by Iyengar and Greenhouse (1988) and "data mining" by Merton (1987), Black (1986, 1993), and Lo and MacKinlay (1990).<sup>9</sup> Essentially, the true **statistical** significance of **successful** investment **strategies** can be assessed only after quantification of the number of unreported or unpublished failures gathering dust in the file drawers of stock market analysts, traders...

17/3,K/8 (Item 3 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)  
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01724637 03-75627

**Diminishing returns**

Edlin, Bob  
Management-Auckland v45n9 PP: 84 Oct 1998  
ISSN: 0025-1658 JRNL CODE: MNZ  
WORD COUNT: 874

...TEXT: and more. But, as shown by the statistics, "we are not keeping up. Our market share has slipped in most of the key markets."

The **statistics** indicate something is amiss and our apparent poor **performance** poses key **policy** challenges. One response is the Government's review of the producer boards. It may also be time for a rethink of the role of the government institutions dealing with trade and of attitudes towards international expansion by the SOEs, the Institute said. More importantly, "a bit of soul- **searching** by New Zealand businesses would not go amiss".

17/3,K/9 (Item 4 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)  
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01327057 99-76453

**A database perspective on knowledge discovery**

Imielinski, Tomasz; Mannila, Heikki  
Communications of the ACM v39n11 PP: 58-64 Nov 1996  
ISSN: 0001-0782 JRNL CODE: ACM  
WORD COUNT: 4512

...TEXT: just as SQL queries can be embedded in host languages such as C or Cobol.

The proposed research program is as follows: First a KDD **query** language has to be formally defined (prompting questions about desired expressive power, and so forth), then **query** optimization tools would be developed to compile **queries** into reasonably **efficient** execution **plans**. These execution plans will include existing inductive learning and **statistical** data analysis algorithms and may include new inductive tools as well. Note how this plan essentially mirrors the development of **query** languages and **query** optimization in relational **databases**.

Thus, in our view, database mining is not simply another buzzword for

statistical data analysis or inductive learning on large data sets. The key new...

17/3,K/10 (Item 5 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
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00603113 92-18216

**Oracle Preps Distributed DBMS Pack**

O'Brien, Timothy  
Network World v9n10 PP: 1, 6 Mar 9, 1992  
ISSN: 0887-7661 JRNL CODE: NWW  
WORD COUNT: 736

...TEXT: The company will offer a so-called cost-based optimizer and a resource limiter capability to boost performance and improve control over system resources during **query** execution. The cost-based optimizer chooses the most **efficient query** execution **plan** after analyzing **database statistics**, such as the size of rows and columns.

"Oracle needed to provide a strong query optimizer," said Shaku Atre, president of Atre Consulting in Rye...

17/3,K/11 (Item 6 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
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00590845 92-06018

**Using Decision Support Systems to Market Prepaid Medical Plans**

Forgionne, Guisseppi A.  
Journal of Health Care Marketing v11n4 PP: 22-38 Dec 1991  
ISSN: 0737-3252 JRNL CODE: JHC

...ABSTRACT: marketing information and convert the information into market-effective health plans. The inputs into DSS processing are data that are captured and stored in a **database** and models that are secured and saved in a modelbase. The decision maker uses computer technology within the DSS to: 1. organize the collected data, 2. structure the **statistical** and simulation models, and 3. simulate **performance** from specified **plan** designs. The computer technology consists of a microcomputer linked through a modem with communications software to a minicomputer or mainframe. The DSS processing generates statistical...

17/3,K/12 (Item 7 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
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00052698 77-05045

**DATABASE MANAGEMENT SYSTEM IMPROVES OPERATING EFFICIENCY**

BEST'S REVIEW (PROP/CASUALTY) V77 N11 PP: 79-82 MAR. 1977  
JRNL CODE: BIP

ABSTRACT: A NEW COMPUTER COMPLEX WHICH EMPLOYS THE **DATABASE** MANAGEMENT CONCEPT IS HELPING THE STATESMAN GROUP OF INSURANCE COMPANIES TO IMPROVE THE EFFICIENCY OF ITS OPERATIONS AND SIMULTANEOUSLY TO UPGRADE THE QUALITY OF ITS...

...THE U.S. PRESENT APPLICATIONS ARE PROCESSING AUTOMOBILE, FIRE, CASUALTY, AND LIFE INSURANCE POLICIES, PREMIUM AND AGENCY ACCOUNTING, CLAIMS AND RESERVES ACCOUNTING, AND PREPARATION OF **STATISTICS**. TWO IMMEDIATE BENEFITS WILL BE FASTER CLAIMS PROCESSING AND MORE **EFFICIENT** PROCESSING OF **POLICY** INFORMATION. THE **DATA BASE** WILL CONSIST PRIMARILY OF POLICY INFORMATION, CUSTOMER NAMES, ADDRESSES, AND DETAILS OF THEIR POLICIES. THE COMPUTER ALSO PREPARES A SERIES OF MONTHLY MANAGEMENT REPORTS OUTLINING...

21/3,K/1 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2003 The Gale Group. All rts. reserv.

02667534 SUPPLIER NUMBER: 93955237 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Our Environment: part 2, governments, laws, and organizations.**  
Keiser, Barbie E.  
Searcher, 10, 10, 54(10)  
Nov-Dec, 2002  
ISSN: 1070-4795 LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 5959 LINE COUNT: 00786

... OECD home page (<http://www.oecd.org>), provides governments with the analytical basis to develop policies that are effective and economically efficient, including through country **performance** reviews, data collection, **policy** analysis, projections and modelling, and the development of common approaches." Search the OECD Web site (<http://www.oecd.org/search>) for all documents published within the Theme = Environment. (When we last checked, there were 1,628 documents available from the OECD Environment Directorate.) Key Environmental Indicators and other **statistical** data related to the environment can be found in the OECD **Statistics** Portal, also located on the left-hand navigation bar of the OECD home page (<http://www.oecd.org>).

\* The European Environment Agency (<http://www.eea...current issue>, plus archives, are accessible online.

Organizations Concerned with the Environment

As a source of information and expert assistance, we need to distinguish between **organizations** that issue **policy** papers dealing with many social issues, including the environment, versus those that might be considered "activist" on behalf of environmental concerns. For instance, the Cato...

21/3,K/2 (Item 1 from file: 636)  
DIALOG(R)File 636:Gale Group Newsletter DB(TM)  
(c) 2003 The Gale Group. All rts. reserv.

02562628 Supplier Number: 45172496 (USE FORMAT 7 FOR FULLTEXT)  
**UNDERSTANDING BACKUPS FE A Business Perspective**  
Computer Audit Update, pN/A  
Dec, 1994  
Language: English Record Type: Fulltext  
Document Type: Newsletter; Trade  
Word Count: 2134

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...even a minor mishap with computers or their data can result in severe business disruption (and, ultimately, the complete disruption or failure of the business). **Statistics** from a number of sources (DTI, Loughborough University, IBM amongst others) show that as many as 70% of companies suffering some form of computer failure...

...data. The protection of data is only necessary as it relates to the ongoing operation of the business. Since a computer is usually the sole **repository** of the data it contains (there are no written copies) then backing up that data becomes a business issue. Strategic issues A backup strategy must...For example, a company may have a server with 300 Megabytes of application software (such a total being quickly reached with Word Processor, Spreadsheet, Graphics, **Database** and other products) but only, say, 100 Megabytes of business-critical data. This means that 75% of every backup is wasted; or, to put it...

...cost. And that additional backup cost is not just in time to take the backup (itself potentially considerable) but also in media cost and in **retrieve** time. This last mentioned item is particularly relevant when users are keen to recover a single file. Having to scan through 400 Mbytes of data clearly takes longer than scanning just 100. These additional costs

and times often fool the company into thinking it cannot afford to implement a fully **effective** backup **strategy** incorporating the best in off-site and security. Management issues It can be seen from the foregoing that there are potential technical issues surrounding backup...

...to survival following some form of disaster it must form part of the organization's overall planning for crisis. The extent to which any given **organization plans** for disaster depends on its size as well as its particular place in the market. Clearly, some organizations have more to lose or are at...need it. Backups save lives - or at least backups save companies and businesses which, for some, is as good as saving a life. Yet the **statistics** continue to show that most organizations are not sufficiently protected against computer data loss. Overcoming the chore today is never going to succeed as the...

21/3,K/3 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2003 The Gale Group. All rts. reserv.

10103901 Supplier Number: 91210664 (USE FORMAT 7 FOR FULLTEXT)  
**Online toolkits for Web development activities. (Web Site Management).**  
Guenther, Kim  
Online, v26, n5, p82(4)  
Sept-Oct, 2002  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Professional Trade  
Word Count: 2804

... name and/or number at the end of each file name.  
This same strategy can be applied to designate color use within your template. The **templates** I support within my **organization** reference a matrix of 54 browser-safe colors. We not only provide this color matrix to in-house developers to pick their template colors, we...

...another location on the server, or onto another server entirely. This has tremendous advantages if you decide to serve up these assets from a backend **database** or choose to cache these files for more efficient loading on the server. Single-source referencing allows more **efficient** caching of **template** assets on the user's desktop, since images used more than once on the corporate Web site are referenced from a single location. Single-source referencing also allows easier restriction of these files from **search engine** indexing and server traffic logs so that the files don't get "counted" with your overall site **statistics** report.

From an in-house developer perspective, single-source referencing makes it easier to "search and replace" directory path statements throughout the entire site using...

21/3,K/4 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2003 The Gale Group. All rts. reserv.

10592601 SUPPLIER NUMBER: 53177608 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Energy.com Offers Consulting Services to the Energy Industry.**  
Business Wire, 1104  
Nov 5, 1998  
LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 452 LINE COUNT: 00046

... improvement, project management performance, and cost modeling.  
The transition to a deregulated energy market offers both challenge and opportunity. The Energy.com consultants recast market **strategies**, products and services, and **organizational** structures to capitalize on this opportunity.  
Process improvement is one element of managing change to improve business performance. The process improvement program is implemented to...



...proven project management processes and tools.

One element of managing processes, businesses or projects is cost management. Energy.com's consultants use proprietary energy industry **databases** and tools to assist clients with cost modeling, factoring in known and predicted quantities and tasks. The tools include extensive data collected on the North American energy industry, predictive and **statistical** analyses and a depth of executive experience to allow analysis from different perspectives as well as the implementation of **effective strategies** to deal with predicted scenarios.

Energy.com Corp. offers an Internet-based energy resource, www.energy.com, dedicated to serving energy consumers' needs through news ...

21/3,K/5 (Item 2 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2003 The Gale Group. All rts. reserv.

08933940 SUPPLIER NUMBER: 18601815 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Assessing the merit of merit pay: employee reactions to performance-based pay.**

Lowery, Christopher M.; Petty, M.M.; Thompson, James W.

Human Resource Planning, v19, n1, p26(12)

March, 1996

ISSN: 0199-8986 LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 6775 LINE COUNT: 00555

... Mejia and Balki, 1989; Kahn and Sherer, 1990; Kopelman, Rovenpor, and Cayer, 1991).

Though a great deal of research has been conducted on merit pay, **searching** for statistically significant relationships among the relevant variables, employees who have worked under a merit pay system have been given little opportunity to express in their own words what they think of this reward system. This paper reports on a **performance** -based pay **plan** implemented in a large company and employees' reactions to the plan. Through the medium of open-ended questions, employees were given a chance to voice...presents a major obstacle in the implementation of performance-based pay plans, a dilemma that must be resolved for merit pay to be successful.

In **order** for a merit pay **plan** to be successfully implemented, a condition of reward contingency must exist. Performance-contingent rewards are necessary. It is imperative that employees perceive a link between... objectives, to the detriment of helping fellow workers, as the accomplishment of individual goals was supposedly linked directly to higher pay. However, funding for the **plan** was based in part on **organizational** goals; the desire to achieve these organizational goals could foster teamwork.

When the responses in Table 2 were broken down according to job level, there...Variables: A Field Experiment." Academy of Management Journal, 25(2) (1982), 359-372.

Jenkins, G.D., & E.E. Lawler, "Impact of Employee Participation in Pay **Plan** Development." **Organizational** Behavior and Human Performance, 28 (1981), 111-128.

Johnson, A.M., and N.D. Hobart, "Why is it So Hard to Pay for Performance?" Journal...

21/3,K/6 (Item 3 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2003 The Gale Group. All rts. reserv.

08814611 SUPPLIER NUMBER: 17102301 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**The world price of foreign exchange risk.**

Dumas, Bernard; Solnik, Bruno

Journal of Finance, v50, n2, p445(35)

June, 1995

ISSN: 0022-1082 LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 12789 LINE COUNT: 01129

... the MRS is a nonlinear function of consumption and consumption may be a nonlinear function of returns. (27) To illustrate the role played by the **strategy** space in deriving first- **order** conditions, consider the problem of writing the unconditional efficiency of a portfolio policy among the strategies with portfolio weights that are linear in the information... 1993, The **performance** of international **strategies** using conditioning information, Journal of Empirical Finance 1, 33-56. Stehle, R., 1977, An empirical test of the alternative hypotheses of national and international pricing...

21/3,K/7 (Item 4 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2003 The Gale Group. All rts. reserv.

07813615 SUPPLIER NUMBER: 17016936 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Claims database research. (Continuing Education)**  
Briesacher, Becky A.; Erwin, W. Gary; Cornwell, Stephen  
American Druggist, v211, n6, p48(8)  
April, 1995  
ISSN: 0190-5279 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
WORD COUNT: 4774 LINE COUNT: 00401

... to preserve-confidentiality, encourage self-improvement since physicians can compare their performance to their peers and adjust accordingly. These reports also identify physicians who violate **organizational policies**, such as prescribing nonformulary drugs or prescribing only branded products when generics are available. In such cases, the physician is generally targeted for an intervention...

...such as timely refills.

#### CONCLUSION

Pharmacists can perform important roles as agents of information and intervention for PBMS, insurers, and MCOS. Research using insurance claims **databases** is growing in capabilities, **statistical** sophistication, and influence. Researchers from all areas of health care are looking to claims data for accessible effectiveness information to determine the nonclinical trial costs of illnesses, the cost- **effectiveness** of alternative treatment **plans**, and the optimal outcomes of available therapies. MCOS are beginning to recognize the capital represented by their **databases** and are investing more time, manpower, and resources into developing and using them. Companies are emerging with the sole business of gathering and selling automated...

21/3,K/8 (Item 5 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
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07609517 SUPPLIER NUMBER: 15914518 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**TARGET for the biomedical searcher. (DIALOG online database searching technique)**  
Snow, Bonnie  
Online, v18, n6, p58(6)  
Nov-Dec, 1994  
ISSN: 0146-5422 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 2412 LINE COUNT: 00244

... able to assign them greater "weight," bringing citations with a higher occurrence of endpoints and/or outcomes to the top of the list.

#### TARGET PLUS **RANK** FOR ASSISTANCE IN **STRATEGY** FORMULATION

One of the most powerful applications of TARGET is to isolate relevant bibliography information for organized analyses of index terms via RANK. A search...

...in output from each approach can be eliminated using NOT. A sample of titles retrieved using patent classification versus concept keywords shows

the value of **RANKed** indexing analysis to help with **strategy** formulation. TARGET paves the way by focusing the analysis on a manageable, pre-screened subset.

Techniques can also be applied in biomedical **databases**. First, use TARGET to locate a few good references, then RANK DE for **statistical** assessment of indexing terms. This combination of two **search** "power tools" is highly **effective** when constructing precision **strategies**.

#### TIPS ON TECHNIQUE

Knowing more about how TARGET really works will help experienced searchers manipulate the system to derive maximum benefit from this feature. First...

21/3,K/9 (Item 6 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
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07291520 SUPPLIER NUMBER: 15405546 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Is there milk and honey in the promised land?: A profile of investing in Israel. (Silver Anniversary Essays)**  
Bonwitt, Gil J.  
Law and Policy in International Business, 25, n2, 491-515  
Wntr, 1994  
ISSN: 0023-9208 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 10061 LINE COUNT: 00816

... Development, Investment Incentives and Disincentive and the International Process (1983); Investment Incentives and Performance Requirements (S. Guisinger ed. 1985) [hereinafter Investment Incentives]; Kojo Yelapaala, In **Search of Effective Policies** for Foreign Direct Investment: Alternatives to Tax Incentive Policies, 7 N.W. J. Int'l L. & Bus. 208 (1985); Ibrahim F.I. Shihata, Factors Influencing...

...1986) [hereinafter Maturing Through Crises]. (16.) Id. at 1. (17.) Israel has a population of close to 5.2 million people. See Central, Bureau of **Statistics**, **Statistical Abstract of Israel 1993** (1993). (18.) U.S. Dept. of Com., Overseas Business Reports: Marketing in Israel 9 (1988) [hereinafter Marketing in Israel]. (19.) Such...Feb. 15 1989). (58.) The Israeli court system has joined the legislative and executive branch in opening the country's markets. Israel's Supreme Court **ruled** against longstanding exclusivity agreements in **order** to open the Israel's market to more competition. Israeli Supreme Court Ruling Open Markets to Parallel Import, Wider Range of Products, 7 Int'l...

21/3,K/10 (Item 7 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2003 The Gale Group. All rts. reserv.

06515984 SUPPLIER NUMBER: 14174397 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Japan's growing capabilities in industrial technology: implications for U.S. managers and policymakers.**  
Mowery, David C.; Teece, David J.  
California Management Review, v35, n2, p9(26)  
Wntr, 1993  
ISSN: 0008-1256 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 8844 LINE COUNT: 00757

... and K. Yamamura, "Japan's Technological Capabilities and Its Future: Overview and Assessments," in G. Heiduk and K. Yamamura, eds., Technological Competition and Interdependence: The **Search** for Policy in the United States, West Germany, and Japan (Seattle, WA: University of Washington Press, 1990). It is also possible, although there is no...

...Product Development in the World Automobile Industry," Brookings Papers on Economic Activity (1987), pp. 729-771. [10.] K. B. Clark and T. Fujimoto, Product Development **Performance : Strategy , Organization , and Management in the World Auto Industry** (Boston, MA: Harvard Business

School Press, 1991). [11.] E. Mansfield, "Industrial Innovation in Japan and the United States...quantitative terms, than that of the American universities but comparable to that of European universities." L. Stenberg, "Molecular Beam Epitaxy - A Mesoview of Japanese Research **Organization**," unpublished manuscript, Research **Policy** Institute, University of Lund, Sweden, 1990, p. 56. [18.] We are indebted to Dr. Takebi Otsubo of the Nomura School of Advanced Management for his...firms. [33.] P.A. Genther and D. Dalton, "Japanese Affiliated Electronics Companies and U.S. Technological Development: 1990 Assessment," Office of Business Analysis, Economics and **Statistics** Administration, U.S. Department of Commerce, August 1991. [34.] D.C. Mowery, "Public Policy Influences on the Formation of International Joint Ventures," International Trade Journal...

21/3,K/11 (Item 8 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB  
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05926406 SUPPLIER NUMBER: 13606451 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Cross-national differences in trade union membership in OECD countries.**

(**Organization of Economic Cooperation and Development**)

Bean, Ron; Holden, Ken

Industrial Relations Journal, v23, n1, p52(8)

Spring, 1992

ISSN: 0019-8692

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT

WORD COUNT: 4112 LINE COUNT: 00347

... and political unrest which had appeared to threaten the very fabric of society in these countries, the compromises secured became underwritten by governments with compulsory **rules** in **order** to institutionalise industrial conflict[8]. Price and Bain's approach to the analysis of union growth concludes that economic variables are likely to be more...F., Union Growth and the Business Cycle: An Econometric Analysis, Blackwell, 1976. [3.] Bain, G. S. and Price, R., Profiles of Union Growth: A Comparative **Statistical** Portrait Of Eight Countries, Blackwell, 1980. [4.] Hobsbawm, E. J., Labouring Men, Weidenfeld and Nicholson, 1964, p. 127. [5.] Pederson, P. D., 'Union Growth in...

...Political Determinants of Trade Union Growth in Selected OECD Countries: An Update', Journal of Industrial Relations, 31, 1989, pp. 402-6. [10.]

Visser, J., In **Search** of Inclusive Unionism. A Comparative Analysis, University of Amsterdam, 1987, p. 90. [11.] Clegg, Hugh, Trade Unionism Under Collective Bargaining, Blackwell, 1976. [12.] Blyth, C...

...W. J. and Gregory, M. B., 'Bargaining Structure', Management Decision, 18, 1980, p. 113. [14.] Calmfors, L. and Driffill, J., 'Bargaining Structure, Corporatism and Macroeconomic **Performance**', Economic **Policy**, 6, 1988, p. 17. [15.] Ibid., p. 16. [16.] Visser, 'Trade Unionism in Western Europe', p. 151. [17.] Beaumont, P. B., The Decline of Trade...

...1985. [20.] Saunders, P. and Klau, F., 'The Role of the Public Sector', OECD Economic Studies, Paris, 1985, p. 63. Annual figures from OECD, Historical **Statistics**, 1960-1986, 1988. [21.] Bain, G. S. and Price, R., 'Union Growth: Dimensions, Determinants and Density', in Bain, G. S. (ed.), Industrial Relations in Britain...

21/3,K/12 (Item 9 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2003 The Gale Group. All rts. reserv.

05798273 SUPPLIER NUMBER: 11892638 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Competitive strategy for successful hospital management.**

Cleverley, William O.

Hospital & Health Services Administration, v37, n1, p53(17)

Spring, 1992

ISSN: 8750-3735

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT

WORD COUNT: 4952 LINE COUNT: 00438

... and cost reimbursement to one in which competitive factors influence virtually all strategic decisions.

Health care executives who fail to recognize competitive factors in their **strategy** formulation and implementation expose their **organization** to risk of financial losses and even failure. In a 1990 survey conducted by Deloitte & Touche, 43 percent of 1,765 responding hospital executives believed...

...or (3) seeking financial support from a third party, such as a governmental agency, to subsidize financial deficiencies.

#### Methods

For this investigation, empirical observations of **successful strategies** have been drawn from a **data base** of 1,025 hospitals that operate in the largest markets in the United States. All of the hospitals in our universe are defined as "large urban hospitals" under the Medicare prospective payment system. This means that they operate in metropolitan **statistical** areas that have populations exceeding one million.

The data presented is for 1988 only and was obtained using the Healthcare Financial Management Association's (HFMA...

21/3,K/13 (Item 10 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
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04622217 SUPPLIER NUMBER: 09167785 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Large signal design: performance and simulation of a 3W C-band GaAs power MMIC. (Monolithic Microwave Integrated Circuit)**  
White, Paul M.; Curtice, Walter R.; Hendrickson, Mary A.; Chang, Wayne H.  
Microwave Journal, v33, n4, p235(7)  
April, 1990  
ISSN: 0192-6225 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
WORD COUNT: 3510 LINE COUNT: 00276

... Accurate FET models are the basis of successful first-pass MMIC design. The models used in this design, both small and large signal, were derived **statistically** from measurements on test FETs located on the PCM chips. Test FETs of 50 to 150 micron unit gate width and total gate width over the range from 100 to 600 microns were used in **order** to verify the scaling **rules**. All measurements were **performed** on-wafer using a Cascade Microtech Inc. microwave probe station and a DC probe station. We believe that this approach of characterizing small FETs is...

...cold, or unbiased, FET evaluation and Fukui measurements are necessary in establishing accurate unambiguous FET models. [3] All data were stored automatically on a computer **database** for later parameter extraction. Small signal FET models were established for each FET layout tested and the results scaled to 1 mm gate width using...

21/3,K/14 (Item 1 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
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02554545 256234731  
**Normativity and self-presentation: Theoretical bases of self-presentation training for evaluation situations**  
Beauvois, Jean-Leon; Dubois, Nicole  
Journal of Managerial Psychology v16n7/8 PP: 490-508 2001  
ISSN: 0268-3946 JRNL CODE: JMN  
WORD COUNT: 8919

...TEXT: alcohol drinking in certain youth groups, devoting a lot of time to dress in other groups, and so on). The effectiveness of a self-presentation **strategy** based on this **sort** of "local" norm is doubtful. The picture is very different when it comes to judgment norms - precisely, ones like consistency or internality - especially when the

clearsightedness? These preliminary remarks being made, the question may now be raised as to whether social psychologists in **search** of practical applications could design training materials aimed at explicitly making potential "evaluatees" (job seekers, for example) more clearsighted, that is, more aware of the normativity of certain judgments, in such a way that after training, they would be able to adopt more **effective** normative self-presentation **strategies** when under evaluation (as in a job interview). From the moment one agrees that clearsightedness is a social skill, the training would obey the principle...

... norm of internality led certain French social psychologists to propose "training in internality", whose chances of being effective, albeit not yet demonstrated using the standard **statistical** techniques, are very high (Pansu et al., 1998).

This article is based on the idea that training courses of this type are both feasible and...

21/3,K/15 (Item 2 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
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02392766 140744571  
**Youth unemployment outflow rates and labor market programs: Australian evidence**  
Leeves, Gareth  
Contemporary Economic Policy v20n3 PP: 301-315 Jul 2002  
ISSN: 1074-3529 JRNL CODE: CPI  
WORD COUNT: 6946

...TEXT: 1993, 1995), Boeri (1994), Van der Linden et al. (1995), Boeri and Burda (1996), Gora et al. (1996), among others, which asserts that to be **successful** a largescale **policy** measure should be reflected in a **statistically** significant positive correlation between such a measure and outflows from unemployment to employment. Some studies have acknowledged the importance of duration of unemployment by including stocks of long-term unemployed as an explanatory variable to capture the state dependency of **search** effectiveness. Van der Linden et al. (1995) used stocks of unemployment disaggregated by duration in the construction of their dependent variables. None of the previous...Reports, AGPS, Canberra, 3(2), 1991.

Gora, M., H. Lehmann, M. Socha, and U. Sztanderska. "Labor Market Policies in Poland," in Lessons

from Labor Market **Policies** in the Transition Countries, **Organisation** for Economic Cooperation and Development. Paris, 1996.

Haskel, J., and R. Jackman. "Long-Term Unemployment in Britain and the Effects of the Community Programme." Oxford...

21/3,K/16 (Item 3 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
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01804872 04-55863  
**Mining fool's gold**  
McQueen, Grant; Thorley, Steven  
Financial Analysts Journal v55n2 PP: 61-72 Mar/Apr 1999  
ISSN: 0015-198X JRNL CODE: FIA  
WORD COUNT: 8200

...TEXT: was popularized by O'Higgins and Downes (1992) in Beating the Dow, which was first published in 1991.3

Grandfather: Dow Five. The Dow Five **strategy** calls for an additional

**sort** of the 10 Dow Dividend stocks by price and then for buying each year an equally weighted portfolio of the 5 lowest priced stocks within... Higgins or Knowles and Petty (which we call intergenerational mining).<sup>8</sup> The inability to assess the significance of a trading rule found after extensive collective **searching** has been dubbed the "file drawer problem" by Iyengar and Greenhouse (1988) and "data mining" by Merton (1987), Black (1986, 1993), and Lo and MacKinlay (1990).<sup>9</sup> Essentially, the true statistical significance of **successful** investment **strategies** can be assessed only after quantification of the number of unreported or unpublished failures gathering dust in the file drawers of stock market analysts, traders...

21/3,K/17 (Item 4 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
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01593358 02-44347

**Mixed strategy pricing behaviour in the UK package tour industry**

Taylor, Peter

International Journal of the Economics of Business v5n1 PP: 29-46 Feb 1998

ISSN: 0962-1369 JRNL CODE: INJE

WORD COUNT: 9142

TEXT: Headnote:

ABSTRACT In a market, such as that for package tours, in which products are weakly differentiated and information is fuzzy, consumers may adopt **search** behaviour such that **effectively**, they play mixed **strategies** in the selection of the product that they choose to purchase. Tour operators' best response to this behaviour is mixed strategy pricing. Mixed strategy pricing...

... the application of rules of thumb. Strong evidence is found of the form that one operator, at least, produced a pattern of variances that is **statistically** significant and that could not result from the method of analysis adopted in the paper or from an ad hoc allocation of its fixed costs... of choice, are likely to do so over a 'lifetime', and after 'lifetime' search costs have been considered. The individual consumer thus adopts a search **strategy** of much the same **sort** as used in a game against Nature, such as in oil drilling decisions.

**A Simple Model**

A simple model can be formulated in which a...resort, the proportions necessary for an overall mixed strategy can be obtained by setting different price profiles for each hotel across the season. Thus in **order** to achieve mixed **strategy** pricing, a significant portfolio of hotels is necessary. This provides a more convincing reason for why operators want to achieve high market shares than the...

21/3,K/18 (Item 5 from file: 15)  
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**A database perspective on knowledge discovery**

Imielinski, Tomasz; Mannila, Heikki

Communications of the ACM v39n11 PP: 58-64 Nov 1996

ISSN: 0001-0782 JRNL CODE: ACM

WORD COUNT: 4512

...TEXT: just as SQL queries can be embedded in host languages such as C or Cobol.

The proposed research program is as follows: First a KDD **query** language

has to be formally defined (prompting questions about desired expressive power, and so forth), then **query** optimization tools would be developed to compile **queries** into reasonably **efficient** execution **plans**. These execution plans will include existing inductive learning and **statistical** data analysis algorithms and may include new inductive tools as well. Note how this plan essentially mirrors the development of **query** languages and **query** optimization in relational **databases**.

Thus, in our view, database mining is not simply another buzzword for statistical data analysis or inductive learning on large data sets. The key new...used as rule query evaluators.

There is a simple observation often used to make the running time of rule generation dependent on the number of **rules** produced. In **order** to generate a propositional **rule** of the form, Body ==> Consequent, we first measure support (number of tuples) satisfying the body of the rule-a conjunct of descriptors-then we measure support of the conjunct which is a conjunction of Body and Consequent. We divide the former by the latter to get the **rule** confidence.

In **order** to generate a massive number of rules that satisfy the rule query conditions, we first generate a number of frequent conjuncts along with their support...

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**Organizational restructuring and economic performance in leveraged buyouts:  
An ex post study**

Phan, Phillip H; Hill, Charles W L  
Academy of Management Journal v38n3 PP: 704-739 Jun 1995  
ISSN: 0001-4273 JRNL CODE: AMA  
WORD COUNT: 11576

...TEXT: satisfaction, improves their performance, and thus can be expected to improve the performance of a firm (Child, 1984). Third, decentralization can be viewed as a **strategy** for tightening control within an **organization** (Child, 1984; Williamson, 1975). Quasi-autonomous subunits, such as work groups, departments, and divisions can be controlled by monitoring their output and holding members accountable...manager cadres are expensive to maintain, such reduction, so long as effective operations are not compromised, will increase efficiency. Third, a shift to a flatter **organization** can reinforce a **policy** of decentralization. Doing away with middle management layers forces increased accountability. For all of the reasons mentioned earlier, with regard to decentralization, this can be ... management holdings. This model was used to test Hypotheses 2 to 5.(Model 1 omitted) Model 2, in which we regressed the change in an **organizational** characteristic (a measure of **strategy** or structure) against the change in the level of debt, management holdings, and goals, was used to test Hypotheses 6 through 9, 11 through 14...

... a public exchange after their buyouts or that returned to the public domain several years later.

**Data Sources**

Detailed publicly available data pertaining to the **performance** and **strategy** of LBO targets is not always available because most LBOs result in firms going 100 percent private. Moreover, detailed information relating to internal organizational dimensions, such as decentralization and hierarchical complexity, cannot be gleaned from public **databases**. Thus, a questionnaire survey presented itself as the only feasible way of collecting detailed data for a large enough sample of LBO firms to undertake **statistical** hypothesis testing.